IB32 Motherboard

3.5” SBC with Intel ® Bay Trail Processors, HDMI, LVDS, VGA, Dual Giga Ethernet, and Mini- PCIe Interface

User Manual / Engineering Spec.

Version 1.2

FCC Statement

This device complies with part 15 FCC rules. Operation is subject to the following two conditions：

- This device may not cause harmful interference.
- This device must accept any interference received including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a class "a" digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at him own expense.

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Disclaimer

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Warranty

We warrant that each of its products will be free from material and workmanship defects for a period of one year from the invoice date. If the customer discovers a defect, we will, at its option, repair or replace the defective product at no charge to the customer, provided it is returned during the warranty period of one year, with transportation charges prepaid. The returned product must be properly packaged in its original packaging to obtain warranty service.

If the serial number and the product shipping data differ by over 30 days, the in-warranty service will be made according to the shipping date. In the serial numbers the third and fourth two digits give the year of manufacture, and the fifth digit means the month (e. g., with A for October, B for November and C for December).

For example, the serial number 1W13Axxxxxxxx means October of year 2013.

Packing List

Before using this Motherboard, please make sure that all the items listed below are present in your package：

- IB32 Motherboard
- User Manual
- User's Manual & Driver CD
- HDD SATA Cable

If any of these items are missing or damaged, contact your distributor or sales representative immediately.

Customer Service

We provide service guide for any problem as follow steps： The first, contact with your distributor, sales representative, or our customer service center for technical support if you need additional assistance. You may have the following information ready before you call：

- Product serial number
- Peripheral attachments
- Software (OS, version, application software, etc.)
- Description of complete problem
- The exact wording of any error messages

  In addition, free technical support is available from our engineers every business day. We are always ready to give advice on application requirements or specific information on the installation and operation of any of our products. Please do not hesitate to call or e-mail us.

Safety Precautions

- **Warning!**

Always completely disconnect the power cord from your chassis whenever you work with the hardware. Do not make connections while the power is on. Sensitive electronic components can be damaged by sudden power surges. Only experienced electronic personnel should open the PC chassis.

- **Caution!**

Always ground yourself to remove any static charge before touching the CPU card. Modern electronic devices are very sensitive to static electric charges. As a safety precaution, use a grounding wrist strap at all times. Place all electronic components in a static-dissipative surface or static-shielded bag when they are not in the chassis.

Safety and Warranty

1. Please read these safety instructions carefully.
2. Please keep this user's manual for later reference.
3. Please disconnect this equipment from any AC outlet before cleaning. Do not use liquid or spray detergents for cleaning. Use a damp cloth.
4. For pluggable equipment, the power outlet must be installed near the equipment and must be easily accessible.
5. Keep this equipment away from humidity.
6. Put this equipment on a reliable surface during installation. Dropping it or letting it fall could cause damage.
7. The openings on the enclosure are for air convection. Protect the equipment from overheating. DO NOT COVER THE OPENING.
8. Make sure the voltage of the power source is correct before connecting the equipment to the power outlet.
9. Position the power cord so that people cannot step on it. Do not place anything over the power cord.
10. All cautions and warnings on the equipment should be noted.
11. If the equipment is not used for a long time, disconnect it from the power source to avoid damage by transient over-voltage.
12. Never pour any liquid into an opening. This could cause fire or electrical shock.
13. Never open the equipment. For safety reasons, only qualified service personnel should open the equipment.
14. If any of the following situations arises, get the equipment checked by service personnel:
    A. The power cord or plug is damaged.
    B. Liquid has penetrated into the equipment.
    C. The equipment has been exposed to moisture.
    D. The equipment does not work well, or you cannot get it to work according to the user’s manual.
    E. The equipment has been dropped and damaged.
    F. The equipment has obvious signs of breakage.
15. Do not leave this equipment in an uncontrolled environment where the storage temperature is below -20° C (-4°F) or above 60° C (140° F). It may damage the equipment.

Revision History

Version	Date	Note	Author
1.0	2014.03.06	Initial Draft	Marc Tsai
1.1	2014.08.15	Add Recovery Guide	Jimmy Chen
1.2	2014.09.01	Add OS Selection	Jimmy Chen

Contents

CHAPTER 1: GENERAL INFORMATION 2

1.1 INTRODUCTION 2
1.2 FEATURE 2
1.3 MOTHERBOARD SPECIFICATIONS 3
1.4 FUNCTION BLOCK 4
1.5 BOARD DIMENSIONS 5

CHAPTER 2: INSTALLATIONS 7

2.1 MEMORY MODULE (SO-DIMM) INSTALLATION 7
2.2 I/O EQUIPMENT INSTALLATION 8
2.3 JUMPERS AND CONNECTORS 9
2.4 JUMPERS 10
2.5 CONNECTORS AND PIN ASSIGNMENT 14

CHAPTER 3: CHIPSET DRIVER INSTALLATION 26

3.1 STANDARD CMOS FEATURES 26

CHAPTER 4: GRAPHIC DRIVER INSTALLATION 30

4.1 STANDARD CMOS FEATURE 30
4.2 PANEL RESOLUTION SETTING 34

CHAPTER 5: ETHERNET DRIVER INSTALLATION 37

5.1 INSTALLATION OF ETHERNET DRIVER 37

CHAPTER 6: AUDIO DRIVER INSTALLATION 41

6.1 INTRODUCTION 41
6.2 INSTALLATION OF AUDIO DRIVER 41

CHAPTER 7: FINTEK COM PORT DRIVER INSTALLATION .. 44

CHAPTER 8: AMI BIOS SETUP 48

8.1 HOW AND WHEN TO USE BIOS SETUP 48
8.2 BIOS FUNCTIONS 49
8.3 USING RECOVERY WIZARD TO RESTORE COMPUTER 56

CHAPTER 9: APPENDIX 60

9.1 DIGITAL I/O SAMPLE CODE 60
9.2 WATCHDOG SAMPLE CODE 60

CHAPTER 1

General Information

This chapter includes the IB32 Motherboard background information.

Sections include:

- Introduction
- Feature
- Motherboard Specification
- Function Block
- Board Dimensions

Chapter 1: General Information

1.1 Introduction

The IB32 SBC is integrated with Intel® Bay Trail-M Celeron N2930 which offers a high performance computing platform with low power consumption. The new motherboard supports 204-pin SO-DIMM DDR3L at speeds of 1333/1600 MHz, up to 8GB.

One SATAII interface provides ample capacity. With dual Gigabit Ethernet, four COM ports, one USB 3.0 and five USB 2.0, IB32 SBC meet the requirements of today's various applications.

Display requirements are met with rich interfaces, such as HDMI, LVDS, and CRT. The graphic engine adopts Intel® SoC Integrated offer high definition display function, and it also supports 24-bit Dual-Channel LVDS.

With all of the integrated features, IB32 SBC is designed to satisfy most of the applications in the industrial computer market, such as Gaming, POS, KIOSK, Industrial Automation, and Programmable Control System. It is a compact design to meet the demanding performance requirements of today's business and industrial applications.

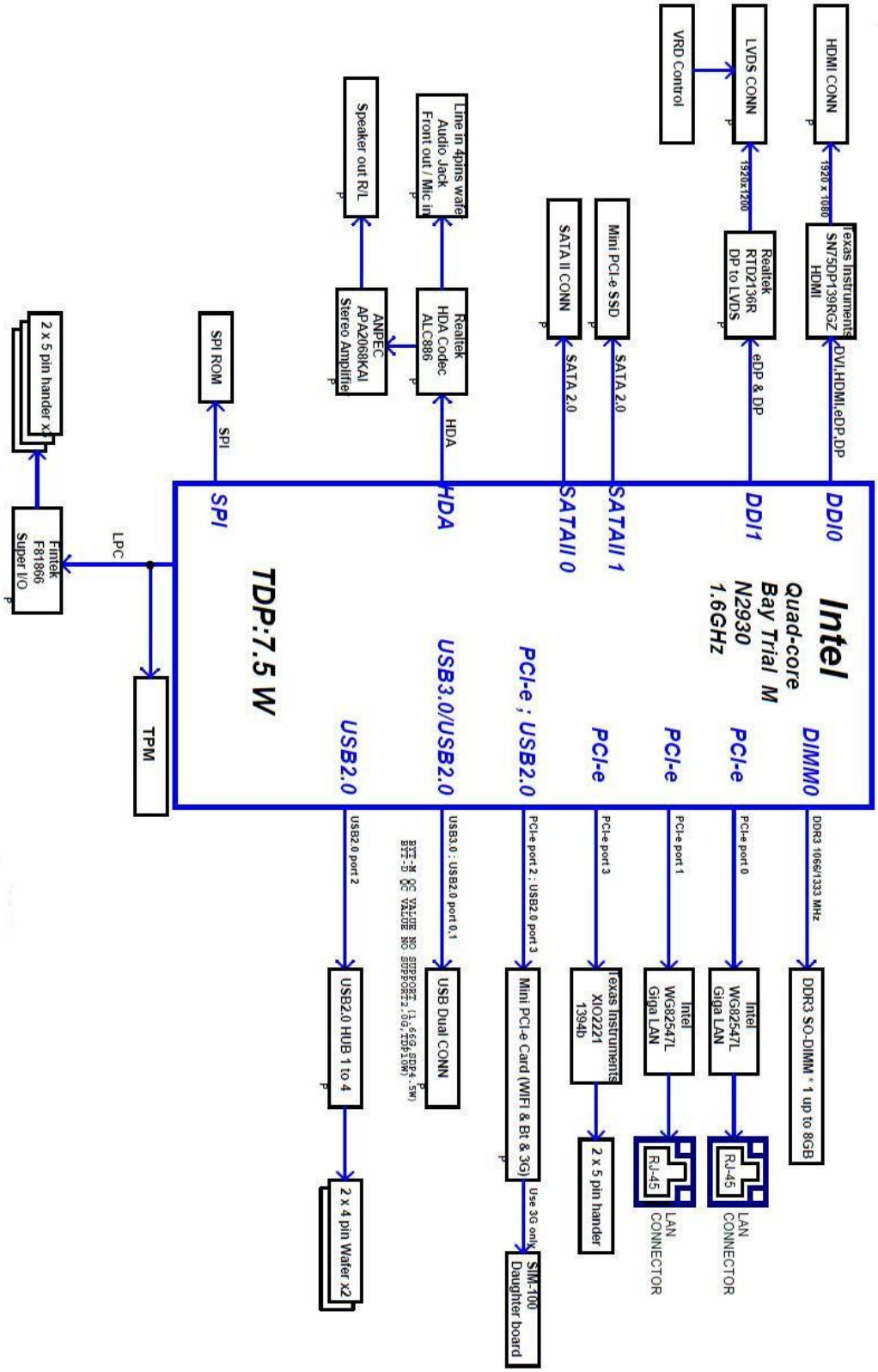
1.2 Feature

- 3.5-inch Form Factor (146mm x 102mm / 5.7 x 4 inches)
- Supports Intel® Bay Trail processors
- Intel® SoC Integrated
- 204-pin SO-DIMM DDR3L 1333/1600 MHz, up to 8GB
- Intel® HD Graphics Engine
- VGA, 18/24-bit Dual-Channel LVDS, 1 x HDMI
- 2 x Intel® WG82574L GbE
- 2 x Mini PCIe (one for wireless, one for mSATA SSD), 4 x COM, 1 x USB 3.0, 5 x USB 2.0, 1 x SATA II, 12-bit GPIO, 1 x 1394b
- DC 12V IN

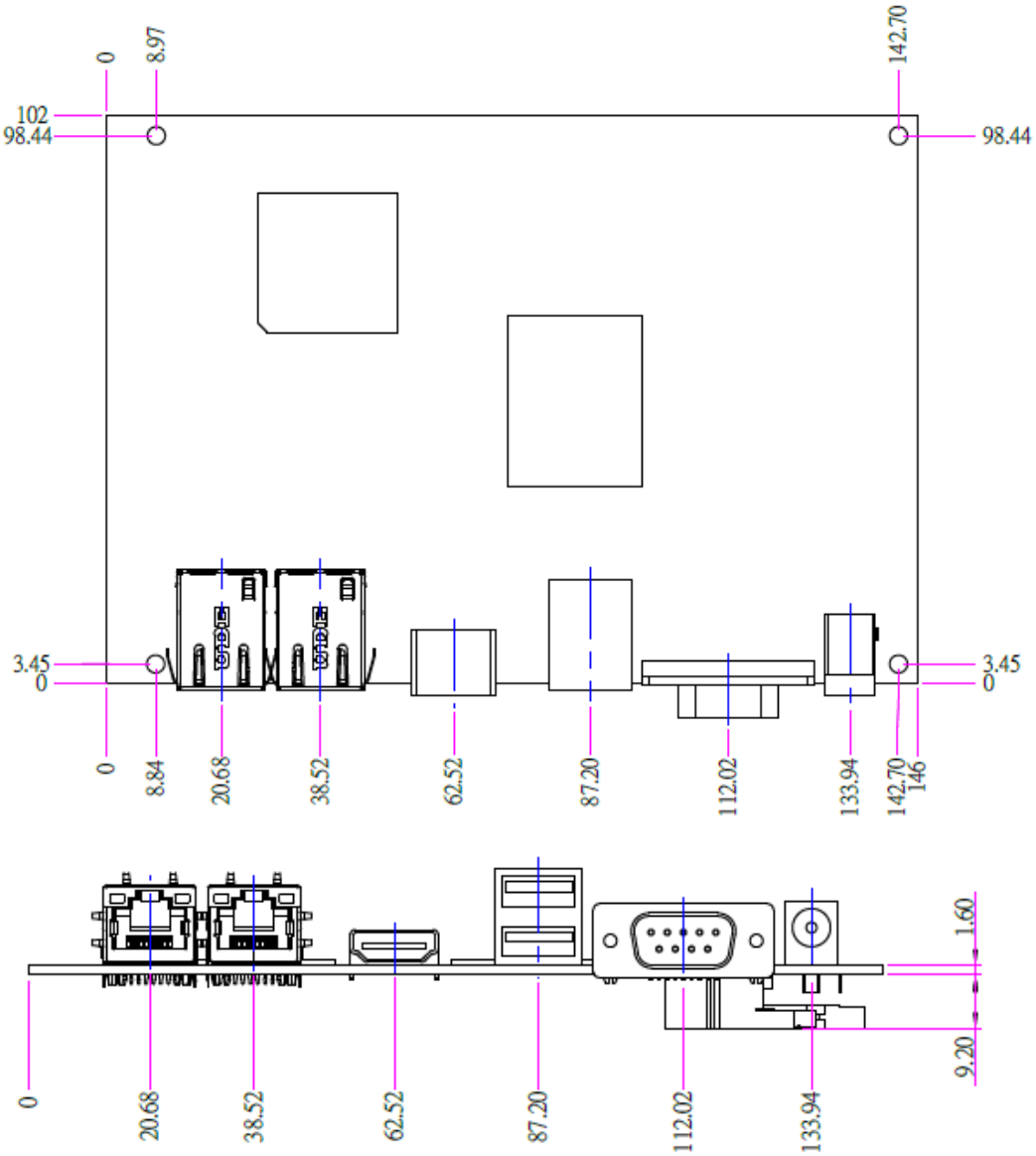
1.3 Motherboard Specifications

Processor	Intel® Celeron® Bay Trail-M N2930 1.83GHz
Chipset	Intel® SoC Integrated
BIOS	AMI 64Mbit Flash
Graphic	Intel® HD Graphics Engine
LCD Interface	Dual-channel 18/24 bit LVDS Up to 1920 x 1080 @ 60Hz
Resolution	VGA Mode : Up to 1600 x 1200 @ 60Hz HDMI : 1920 x 1080 @ 60Hz
LAN	2 x Giga LAN (Intel® WG82574L GbE)
System Memory	204-pin SO-DIMM DDR3L 1333/1600 MHz, up to 8GB
Super I/O	Fintek F81866
Sound	Realtek ALC886 HD Audio Codec
USB	1 x USB 3.0, 5 x USB 2.0
COM	4 x COM ports
Edge Connectors	1 x DC-IN Power Jack (12V/19V) 1 x RS232/422/485 1 x USB 3.0, 1 x USB 2.0 1 x HDMI 2 x Gigabit LAN RJ-45
On Board Pin-Header Connectors	3 x RS-232 / 10-pin(2x5) 4 x USB 2.0 / 8-pin(2x4) 1 x LVDS / 40-pin(2x20) DF-13 connector 1 x SATA II 1 x SATA Power 1 x Digital I/O(12-bit GPIO) / 14-pin(2x7) 1 x Power-input / 2-pin 1 x +12V for external power(Yellow) / 2-pin 1 x +5V for external power(Red) / 2-pin 1 x +3.3V for external power(Blue) / 2-pin 1 x Fan / 3-pin 1 x Panel inverter / 7-pin 1 x Front panel / 10-pin(2x5) 1 x Backlight brightness controller / 3-pin 2 x Speaker with Amp. / 2-pin 1 x VGA / 10-pin(2x5) 1 x 1394b / 10-pin(2x5) (optional) 1 x Audio (Mic-in / Line-in / Line-out) / 12-pin(2x6) 1 x Battery / 2-pin
Power Connector	2-pin Power-input connector
Expansion Slots	1 x Mini PCIe for wireless, 1 x Mini PCIe for mSATA SSD
Form Factor	3.5 inch
Dimensions	146mm x 102mm
Environmental	Operating Temperature: -10~70°C (14~158°F) Operating Humidity: 10~90% Relative Humidity, non-condensing Shock: Operating 15G, 11ms duration Vibration: Operating 5 Hz~500Hz / 1Grms / 3 Axis Certification: CE, FCC, RoHS

1.4 Function Block



1.5 Board dimensions



CHAPTER 2

Installations

This chapter provides information on how to use the jumps and connectors on the IB32 Motherboard.

Sections include:

- Memory Module Installation
- I / O Equipment Installation
- Setting the Jumpers
- Connectors on IB32 Motherboard

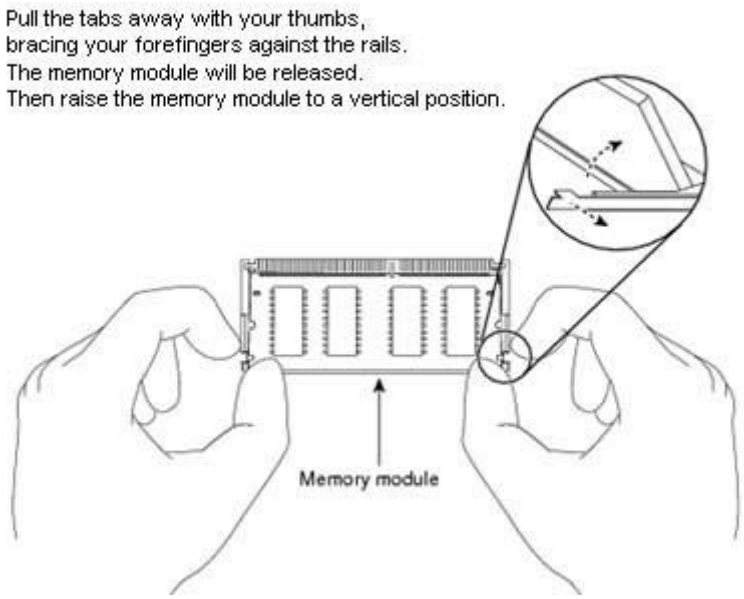
Chapter 2: Installations

2.1 Memory Module (SO-DIMM) Installation

The IB32 Motherboard provides one 204-pin SO-DIMM slot, and it supports up to 8GB DDR3L 1333/1600MHz. When installing the Memory device, please follow the steps below：

Step.1. Firmly inserts the SO-DIMM at an angle into its slot. Align the SO-DIMM on the slot such that the notch on the SO-DIMM matches the break on the slot.

Step.2. Press downwards on SO-DIMM until the retaining clips at both ends fully snap back in place and the SO-DIMM is properly seated.


Pull the tabs away with your thumbs,
bracing your forefingers against the rails.
The memory module will be released.
Then raise the memory module to a vertical position.
Memory module

➢ Caution!

➢ The SO-DIMM only fits in one correct orientation. It will cause permanent damage to the development board and the SO-DIMM if the SO-DIMM is forced into the slot at the incorrect orientation.

2.2 I/O Equipment Installation

2.2.1 12V DC-IN

The Motherboard allows plugging 12V DC-IN jack on the board without another power module converter under power consumption of Intel® Bay Trail-M Celeron N2930 Processor.

2.2.2 Serial COM ports

One COM port connector which supports RS232/422/485 function by jumper setting has been built-in the rear I/O, and three internal COM ports can be connected to a serial or an optional touch-screen when an optional touch-screen is ordered with Panel PC.

2.2.3 External HDMI

The Motherboard has one HDMI port that can be connected to an external LCD monitor by using HDMI cable, and it also needs to be connected to the outlet by power cable. The HDMI connector is a standard 19-pin Type A connector.

2.2.4 Ethernet interface

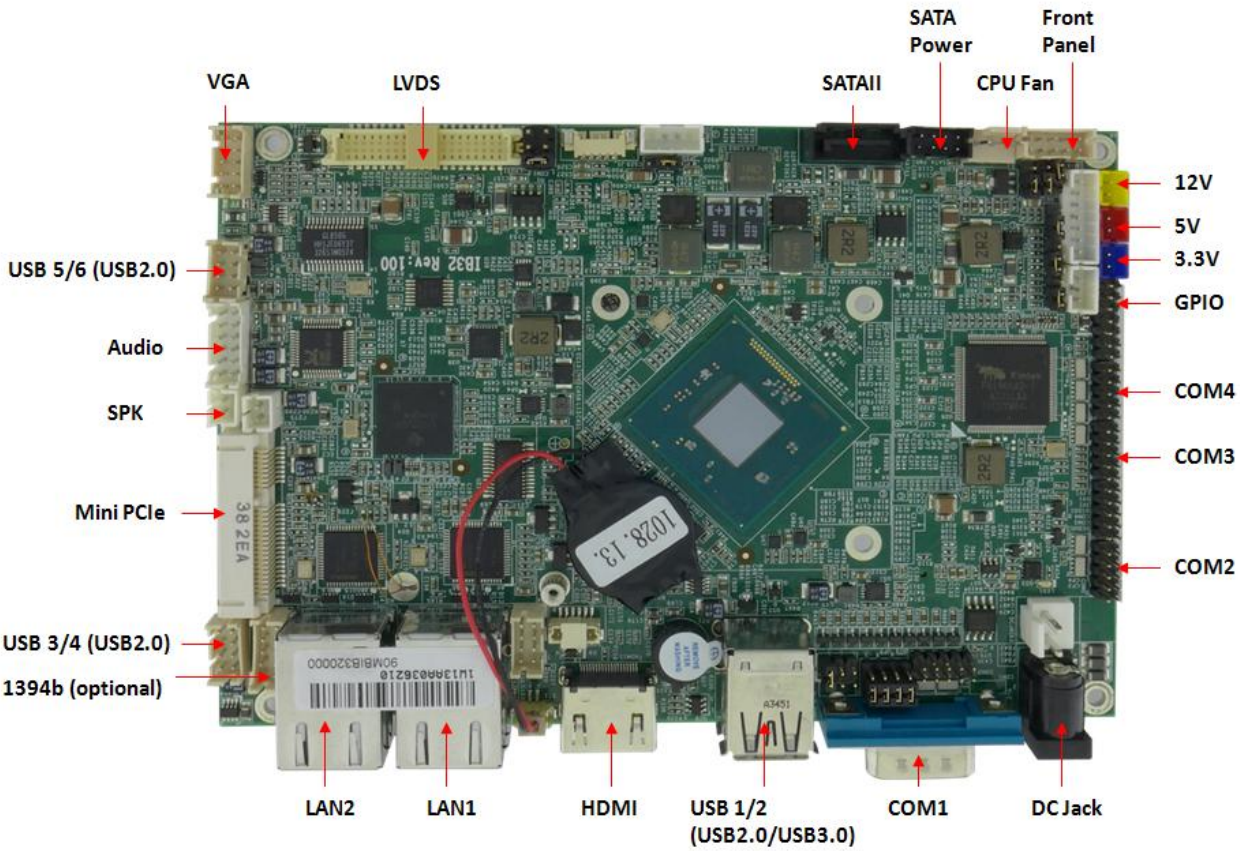
The Motherboard is equipped with Intel® WG82574L GbE chipset which is fully compliant with the PCI 10/100/1000 Mbps Ethernet protocol compatible. It is supported by major network operating systems. The Ethernet ports provide two standard RJ-45 jacks.

2.2.5 USB ports

Six USB devices (Four with pin headers) may be connected to the system though an adapter cable. Various adapters may come with USB ports. USB usually connect the external system to the system. The USB ports support hot plug-in connection. Whatever, you should install the device driver before you use the device.

2.3 Jumpers and Connectors

Component Side



Solder Side

2.4 Jumpers

2.4.1 Jumper List

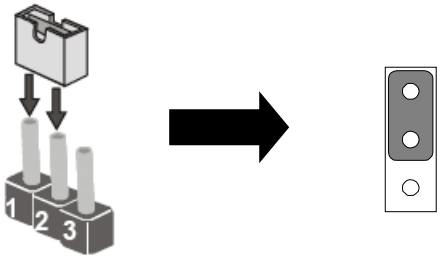
The following table lists the function of each of the board's jumpers.

Label	Function	Note
JP1	Inverter Voltage Select	3x1 header , pitch 2.0mm
JP2	Inverter Enable Select	3x1 header , pitch 2.0mm
JP4	DC Mode Control	3x1 header , pitch 2.0mm
JP5	From SoC Brightness PWM Voltage Select	3x1 header , pitch 2.0mm
JP6	Brightness Control Select	3x1 header , pitch 2.0mm
JP7	Brightness Control to VRD	3x1 header , pitch 2.0mm
JP8	COM Port Select	2x3 header , pitch 2.0mm
JP9	COM Port Select	3x4 header , pitch 2.0mm
JP10	VRD Brightness Function	3x1 header , pitch 2.0mm

2.4.2 Jumper Settings

A metal-bridge jumper used to close an electric circuit, and it usually consists of two metal pins and one small clip protected by a plastic cover that slides over the pins to connect them. Users can connect the pins with the clip to close a jumper, and remove the clip to open a jumper. Generally, a jumper will have three pins which labeled 1, 2, and 3. In this case, you would connect either pins 1 and 2, or 2 and 3.

The jumper setting diagram is as below. If a jumper shorts pin 1 and pin 2, the setting diagram is shown as the right one.



A pair of needle-nose pliers may be helpful when working with jumpers. If you have any doubts about the best hardware configuration for your application, contact your local distributor or sales representative before you make any changes.

JP1: Inverter Voltage Select

Location	Header Type	Description	Function
JP1	Header 3*1	Inverter Voltage Select	1-2: 5.0V
			2-3: 12 V

※ Default : 1-2

JP2: Inverter Enable Select

Location	Header Type	Description	Function
JP2	Header 3*1	Inverter Enable Select	1-2: Control to BLON
			2-3: Normal (Always)

※ Default : 1-2

JP4: DC Mode Control

Location	Header Type	Description	Function
JP4	Header 3*1	DC Mode Control (For VR)	1-2: Control to VRD
			2-3: Normal(For DC)

※ Default : 2-3

JP5: From SoC Brightness PWM Voltage Select

Location	Header Type	Description	Function
JP5	Header 3*1	From SoC Brightness PWM Voltage Select	1-2: 3.3V
			2-3: 5.0V

※ Default : 1-2

JP6: Brightness Control Select

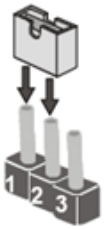
Location	Header Type	Description	Function
JP6	Header 3*1	Brightness Control Select (DC Mode or PWM Mode)	1-2: DC Mode
			2-3: PWM Mode

※ Default : 1-2

JP7: Brightness Control to VRD

Location	Header Type	Description	Function
JP7	Header 3*1	Brightness Control to VRD (VRD PWM)	1-2: Normal Mode
			2-3: VRD Control

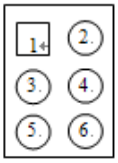
※ Default : 1-2



JP8/JP9: COM Port Select

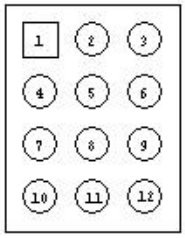
Location	Header Type	Description	Function
JP8	Header 2*3	RS232	1-2
		RS422	3-4
		RS485	5-6

※ Default : 1-2



Location	Header Type	Description	Function
JP9	Header 3*4	RS232	1-2 4-5 7-8 10-11
		RS422	2-3 5-6 8-9 11-12
		RS485	

※ Default : 1-2 4-5 7-8 10-11



JP10: VRD Brightness Function

Location	Header Type	Description	Function
JP10	Header 3*1	VRD Brightness Function	1-2: Analog (VR)
			2-3: Digital (OSD)

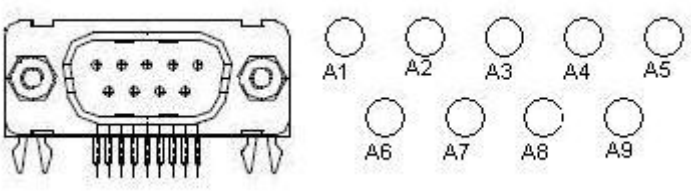
※ Default : 1-2

2.5 Connectors and Pin Assignment

The table below lists the function of each of the board's connectors.

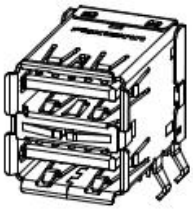
Label	Function
DC Jack	12V Power Input
COM1	RS232/422/485
USB 1/2	USB 3.0/USB2.0 Ports
HDMI 1	HDMI Connector
LAN1 / 2	Intel® LAN Ports
1394b	1394b (optional)
SPK	2W External Speaker
Audio	Line_in / Line_out / Mic_in
VGA	VGA Internal Wafer
LVDS	LVDS Port
SATA II	SATA 2.0 Port
SATA Power	SATA Power
CPU Fan	CPU Fan
Front Panel	System Function (Power / Reset)
3.3V	3.3V Output
5V	5V Output
12V	12V Output
GPIO	General Purpose I/O
12V DC Input	12V DC Power Input Wafer
USB 3/4	USB 2.0 Wafer
USB 5/6	USB 2.0 Wafer
COM2	RS232
COM3	RS232
COM4	RS232
Mini PCIe	Full / Half-Size Mini PCIe
Mini Card Slot	For mSATA SSD Card
DDR3L SO-DIMM	DDR3L SO-DIMM Socket

2.5.1 COM1: RS232/422/485



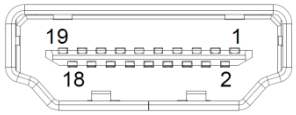
Pin No.	SYMBOL	Pin No.	SYMBOL
1	DCD	2	RxD
3	TxD	4	DTR
5	GND	6	DSR
7	RTX	8	CTS
9	RI		

2.5.2 USB 1/2: USB 3.0 (Lower)/USB2.0 (Upper)Ports



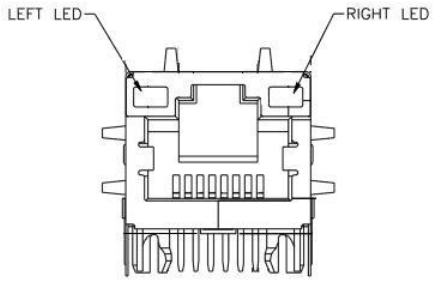
Pin Number	Signal Name	Pin Number	Signal Name
1	+5VUSB3.0	10	+5VUSB2.0
2	U2DN0	11	U2DN1
3	U2DP0	12	U2DP1
4	USB_GND	13	USB_GND
5	U3RXDN1		
6	U3RXDP1		
7	USB_GND		
8	U3TXDN1		
9	U3TXDP1		

2.5.3 HDMI: HDMI Connector



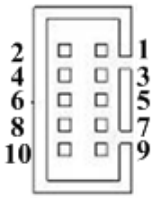
Pin No.	SYMBOL	Pin No.	SYMBOL
1	HDMIB_TMDS0+	2	GND
3	HDMIB_TMDS0-	4	HDMIB_TMDS1+
5	GND	6	HDMIB_TMDS1-
7	HDMIB_TMDS2+	8	GND
9	HDMIB_TMDS2-	10	HDMIB_CLK+
11	GND	12	HDMIB_CLK-
13	GND	14	NC
15	HDMI_DDC_CLK	16	HDMI_DDC_DATA
17	GND	18	+V5S
19	HDMI_HPD1		

2.5.4 LAN1 (LAN2): Intel® LAN Ports (RJ-45)



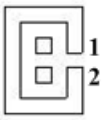
Pin No.	SYMBOL	Pin No.	SYMBOL
1	MDI0_IN+	2	MDI0_IN-
3	MDI1_IN+	4	MDI1_IN-
5	VLAN_12	6	LAN1_DGND
7	MDI2_IN+	8	MDI2_IN-
9	MDI3_IN+	10	MDI3_IN-
11	LAN_VDD	12	LAN_TRAFFICLED#
13	LAN_SPD100LED#	14	LAN_SPD1000LED#
15	UGND	16	UGND

2.5.5 1394b (optional)



Pin No.	SYMBOL	Pin No.	SYMBOL
1	1394b_TPB0+	2	1394b_TPA0+
3	1394b_TPB0-	4	1394b_TPA0-
5	GND	6	GND
7	+V12S	8	N/C
9	N/C	10	N/C

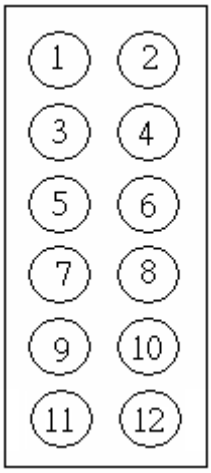
2.5.6 SPK: 2W External Speaker



Pin No.	SYMBOL	Pin No.	SYMBOL
1	LOUT+	2	LOUT-

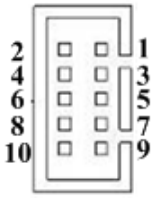
Pin No.	SYMBOL	Pin No.	SYMBOL
1	ROUT+	2	ROUT-

2.5.7 Audio: Line_in / Line_out / Mic_in



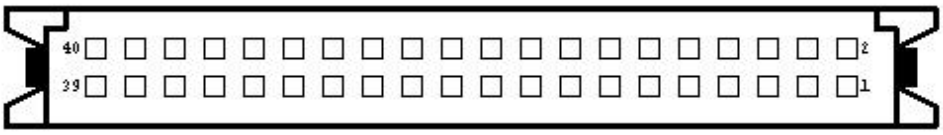
Pin No.	SYMBOL	Pin No.	SYMBOL
1	AZ_FOUT_R	2	AZ_FOUT_L
3	+5VA	4	AUGND
5	LINE1_R	6	LINE1_L
7	MIC1_R	8	MIC1_L
9	AUGND	10	Font_SENSE
11	Mic_SENSE	12	Line_SENSE

2.5.8 VGA: VGA Internal Wafer

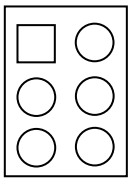


Pin No.	SYMBOL	Pin No.	SYMBOL
1	DAC_SDAT0	2	VGA_5V
3	DAC_SCL0	4	R_FILTER
5	3VHSYNC0	6	G_FILTER
7	3VVSYNC0	8	B_FILTER
9	GND	10	GND

2.5.9 LVDS: LVDS Port

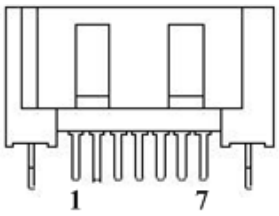


Pin No.	SYMBOL	Pin No.	SYMBOL
1	LCDVDD	2	TXOUT_L0-
3	LCDVDD	4	TXOUT_L0+
5	LCDVDD	6	TXOUT_L1-
7	GND	8	TXOUT_L1+
9	GND	10	TXOUT_L2-
11	GND	12	TXOUT_L2+
13	GND	14	TXCLK_L-
15	GND	16	TXCLK_L+
17	GND	18	TXOUT_L3-
19	GND	20	TXOUT_L3+
21	GND	22	TXOUT_U0-
23	GND	24	TXOUT_U0+
25	GND	26	TXOUT_U1-
27	GND	28	TXOUT_U1+
29	GND	30	TXOUT_U2-
31	GND	32	TXOUT_U2+
33	GND	34	TXCLK_U-
35	GND	36	TXCLK_U+
37	GND	38	TXOUT_U3-
39	GND	40	TXOUT_U3+



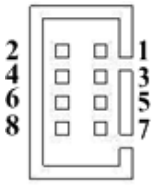
Location	Header Type	Description	Function	
CON5	Header 2*3	LVDS VOLTAGE	3.3V	1-2
			5V	3-4
			12V	5-6

2.5.10 SATA II: SATA 2.0 Port



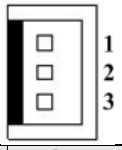
Pin No.	SYMBOL	Pin No.	SYMBOL
1	GND	2	SATA_TXP
3	SATA_TXN	4	GND
5	SATA_RXN	6	SATA_RXP
7	GND		

2.5.11 SATA Power:



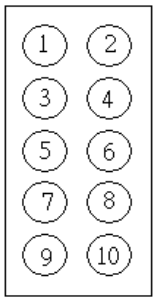
Pin No.	SYMBOL	Pin No.	SYMBOL
1	+12V	2	+12V
3	GND	4	GND
5	GND	6	GND
7	VCC	8	VCC

2.5.12 CPU Fan:



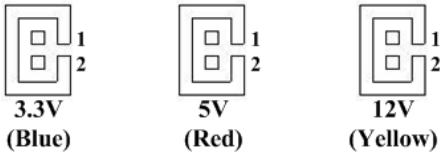
Pin No.	**SYMBOL**	**Pin No.**	**SYMBOL**
1	GND	2	+12V
3	SENSE		

2.5.13 Front Panel: System Function (Power / Reset)



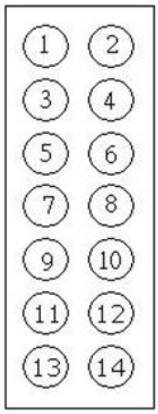
Pin	Signal Name	Pin	Signal Name
1	+V5S	2	+V3.3S
3	GND	4	-HDD_LED
5	PWRBTN#	6	GND
7	GND	8	PWRBTN#
9	N/C	10	+V5A

2.5.14 3.3V (5V / 12V): Power Output



Pin No.	SYMBOL	Pin No.	SYMBOL
1	VCC	2	GND

2.5.15 GPIO: General Purpose I/O

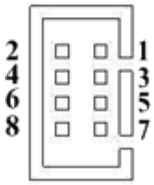


Pin No.	SYMBOL	Pin No.	SYMBOL
1	GND	2	+V5A
3	DOUT3	4	DOUT1
5	DOUT2	6	DOUT0
7	DINT3	8	DINT2
9	DINT1	10	DINT0
11	GPIO53_IN0	12	GPIO56_OUT0
13	GPIO54_IN1	14	GPIO57_OUT1

2.5.16 12V DC Input: 12V DC Power Input Wafer

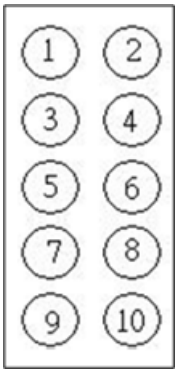
Pin No.	SYMBOL	Pin No.	SYMBOL
1	+12V	2	GND

2.5.17 USB 3/4 (USB 5/6): USB 2.0 Wafer



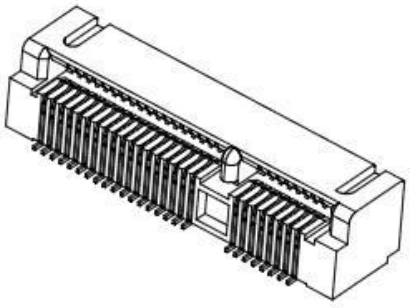
Pin No.	SYMBOL	Pin No.	SYMBOL
1	VCC	2	VCC
3	DATA0-	4	DATA1-
5	DATA0+	6	DATA1+
7	GND	8	GND

2.5.18 COM2 (COM3 / COM4): RS232



Pin	Signal Name	Pin	Signal Name
1	FK_NDCD[2:4]	2	FK_NDSR[2:4]
3	FK_NSIN[2:4]	4	FK_NRTS[2:4]
5	FK_NSOUT[2:4]	6	FK_NCTS[2:4]
7	FK_NDTR[2:4]	8	FK_NRI[2:4]
9	GND	10	GND

2.5.19 Mini PCIe: Full / Half-Size Mini PCIe



Pin No.	SYMBOL	Pin No.	SYMBOL
2	VCC3_MINIPCIE1	1	PCIE_WAKE#
4	GND	3	NA
6	+V1.5S	5	NA
8	VREG_USIM	7	CLK_SLOT4_OE#
10	NA	9	GND
12	NA	11	CLK_PCIE_SLOT4_N
14	NA	13	CLK_PCIE_SLOT4_P
16	NA	15	GND
18	GND	17	NA
20	WLAN-RFON2	19	NA
22	BUF_PLT_RST2#	21	GND
24	+V3.3A	23	PCIE_RXN3_SLOT4
26	GND	25	PCIE_RXP3_SLOT4
28	+V1.5S	27	GND
30	SMB_CLK	29	GND
32	SMB_DATA	31	PCIE_TXN3_SLOT4
34	GND	33	PCIE_TXP3_SLOT4
36	USB_PN5	35	GND
38	USB_PP5	37	GND
40	GND	39	VCC3_MINIPCIE1
42	NA	41	VCC3_MINIPCIE1
44	NA	43	GND
46	NA	45	NA
48	NA	47	NA
50	GND	49	NA
52	VCC3_MINIPCIE1	51	NA
m2	GND	m1	GND

CHAPTER 3

Chipset Driver Installation

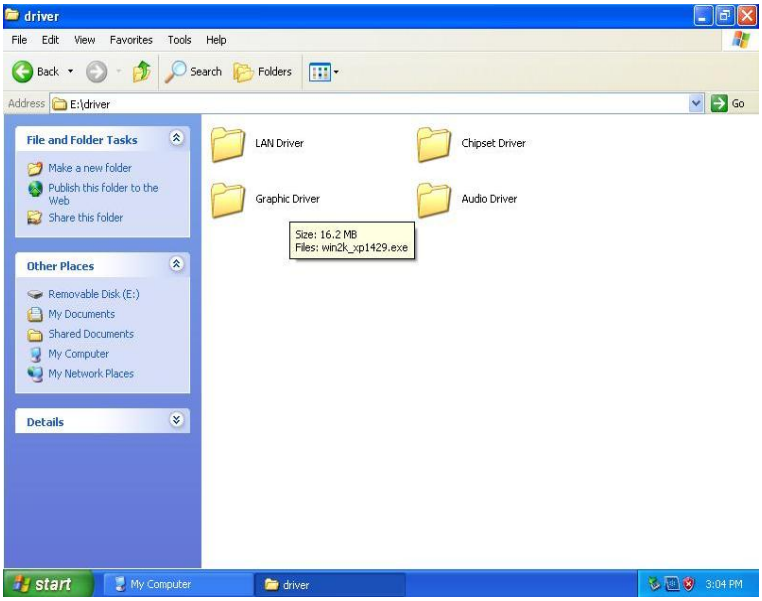
This chapter offers information on the chipset software
Installation utility

- Installation of Chipset Driver
- Further information

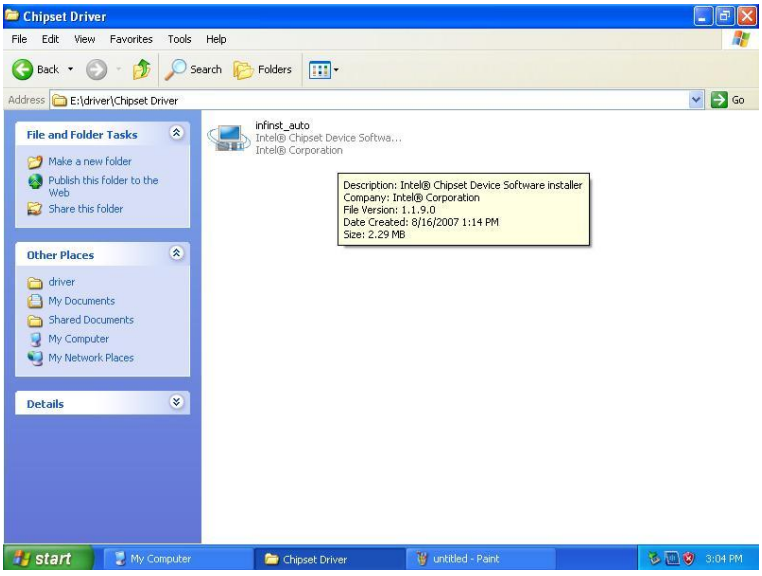
Chapter 3: Chipset Driver Installation

3.1 Standard CMOS Features

Step.1. Insert the CD that comes with the motherboard. Open the file document “Chipset Driver”.



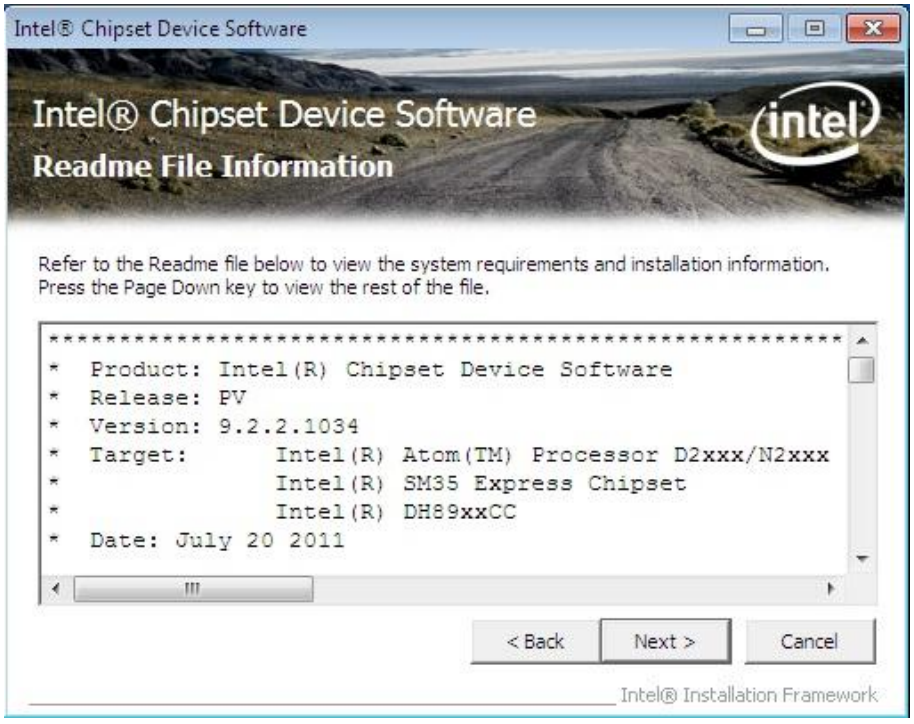
Step.2. Click on “infinst_auto.exe“ to install driver.



Step.3. Click on “Yes “ to agree License

Intel® Chipset Device Software
Intel® Chipset Device Software
License Agreement
intel
You must accept all of the terms of the license agreement in order to continue the setup program. Do you accept the terms?
INTEL SOFTWARE LICENSE AGREEMENT (OEM / IHV / ISV Distribution & Single User)
IMPORTANT - READ BEFORE COPYING, INSTALLING OR USING.
Do not use or load this software and any associated materials (collectively, the "Software") until you have carefully read the following terms and conditions. By loading or using the Software, you agree to the terms of this Agreement. If you do not wish to so agree, do not install or use the Software.
Please Also Note:
* If you are an Original Equipment Manufacturer (OEM), Independent Hardware Vendor (IHV), or Independent Software Vendor (ISV), this complete LICENSE AGREEMENT applies;
< Back
Yes
No
Intel® Installation Framework

Step.4. Click on “Next“ to install driver.


Intel® Chipset Device Software
Intel® Chipset Device Software
Readme File Information
intel
Refer to the Readme file below to view the system requirements and installation information.
Press the Page Down key to view the rest of the file.
****
* Product: Intel(R) Chipset Device Software
* Release: PV
* Version: 9.2.2.1034
* Target: Intel(R) Atom(TM) Processor D2xxx/N2xxx
* Intel(R) SM35 Express Chipset
* Intel(R) DH89xxCC
* Date: July 20 2011
< Back
Next >
Cancel
Intel® Installation Framework

Step.5. Click on “Next“ to install driver.

Intel® Chipset Device Software
Intel® Chipset Device Software
Setup Progress
Please wait while the following setup operations are performed:
Installing Driver: Intel(R) N10/ICH7 Family PCI Express Root Port - 27D4
Version: 9.1.1.1016
Installing Driver: Intel(R) N10/ICH7 Family PCI Express Root Port - 27D6
Version: 9.1.1.1016
Installing Driver: Intel(R) N10/ICH7 Family SMBus Controller - 27DA
Version: 9.1.1.1016
Installing Driver: Intel(R) N10/ICH7 Family PCI Express Root Port - 27D0
Version: 9.1.1.1016
Installing Driver: Intel(R) NM10 Family LPC Interface Controller - 27BC
Version: 9.1.1.1022
Click Next to continue.
Next
Intel® Installation Framework

Step.7. Click on “Yes, I want to restart this computer now“ to go on.

Intel® Chipset Device Software
Intel® Chipset Device Software
Setup Is Complete
You must restart this computer for the changes to take effect. Would you like to restart the computer now?
Yes, I want to restart this computer now.
No, I will restart this computer later.
Click Finish, then remove any installation media from the drives.
Finish
Intel® Installation Framework

CHAPTER 4

Graphic Driver Installation

This chapter offers information on the chipset software Installation utility

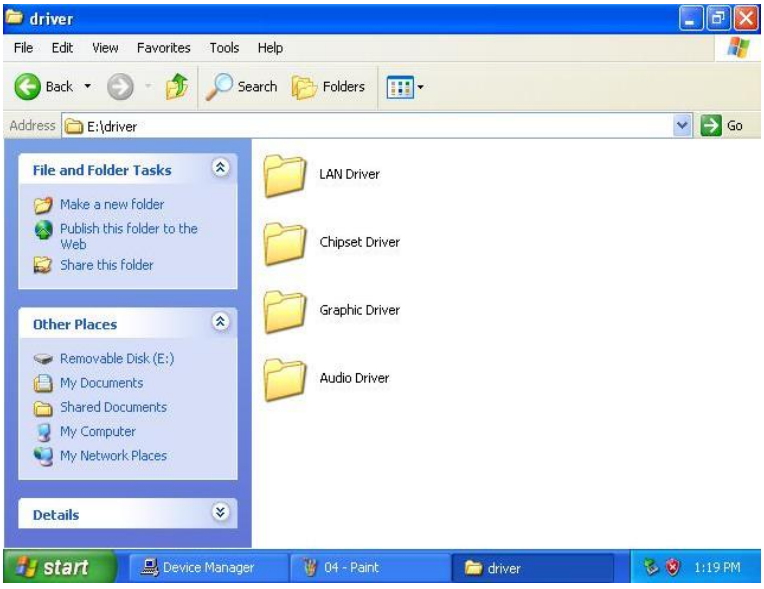
- Installation of Graphic Driver
- Panel Resolution Setting

Chapter 4: Graphic Driver Installation

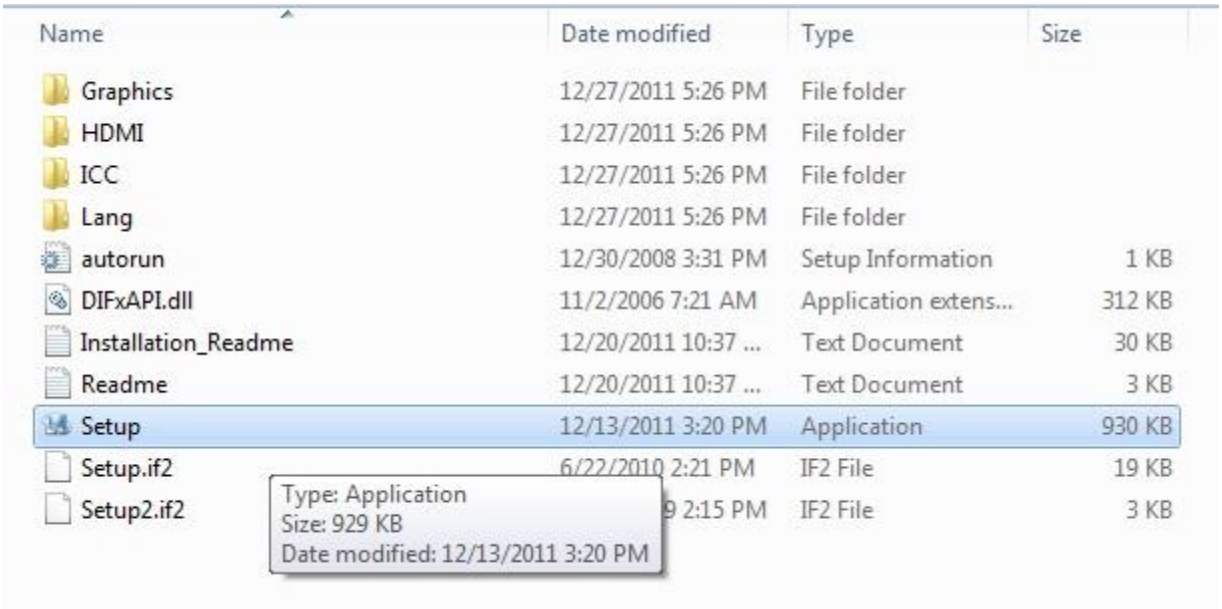
4.1 Standard CMOS Feature

IB32 Motherboard is equipped with Intel SoC Integrated Device. The Intel Graphic Drivers should be installed first, and it will enable “Video Controller (VGA compatible). Follow the instructions below to complete the installation. You will quickly complete the installation.

Step.1. Insert the CD that comes with the Motherboard. Open the file document “Graphic Driver “.



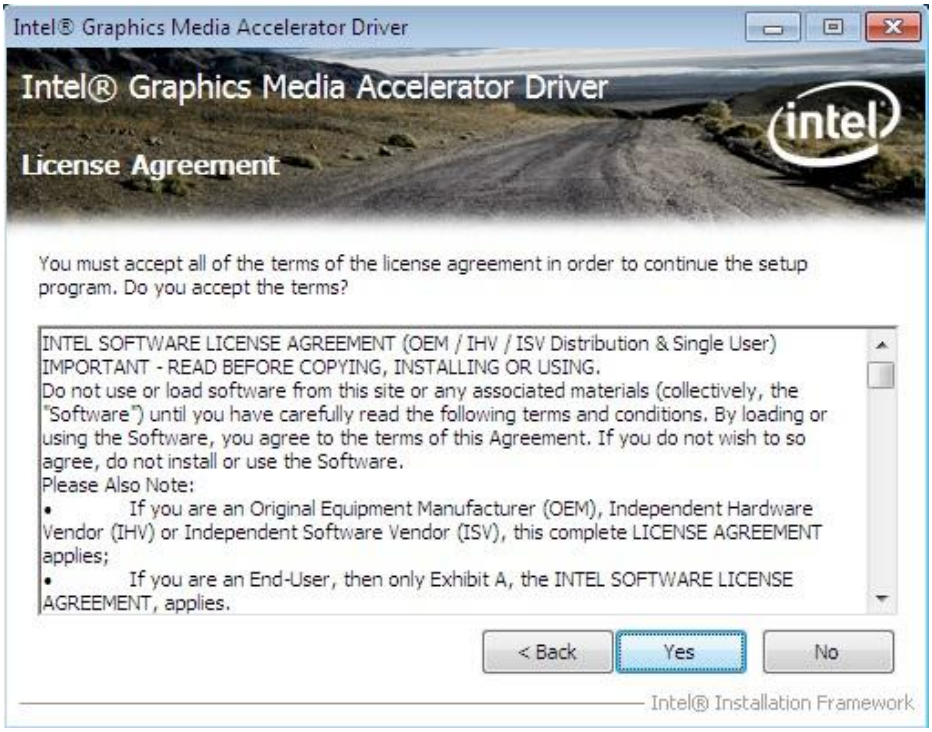
Step.2. Click on “setup” to execute the setup.


Name
Date modified
Type
Size
Graphics 12/27/2011 5:26 PM File folder
HDMI 12/27/2011 5:26 PM File folder
ICC 12/27/2011 5:26 PM File folder
Lang 12/27/2011 5:26 PM File folder
autorun 12/30/2008 3:31 PM Setup Information 1 KB
DIFxAPI.dll 11/2/2006 7:21 AM Application extens... 312 KB
Installation_Readme 12/20/2011 10:37 ... Text Document 30 KB
Readme 12/20/2011 10:37 ... Text Document 3 KB
Setup 12/13/2011 3:20 PM Application 930 KB
Setup.if2 6/22/2010 2:21 PM IF2 File 19 KB
Setup2.if2 9 2:15 PM IF2 File 3 KB
Type: Application
Size: 929 KB
Date modified: 12/13/2011 3:20 PM

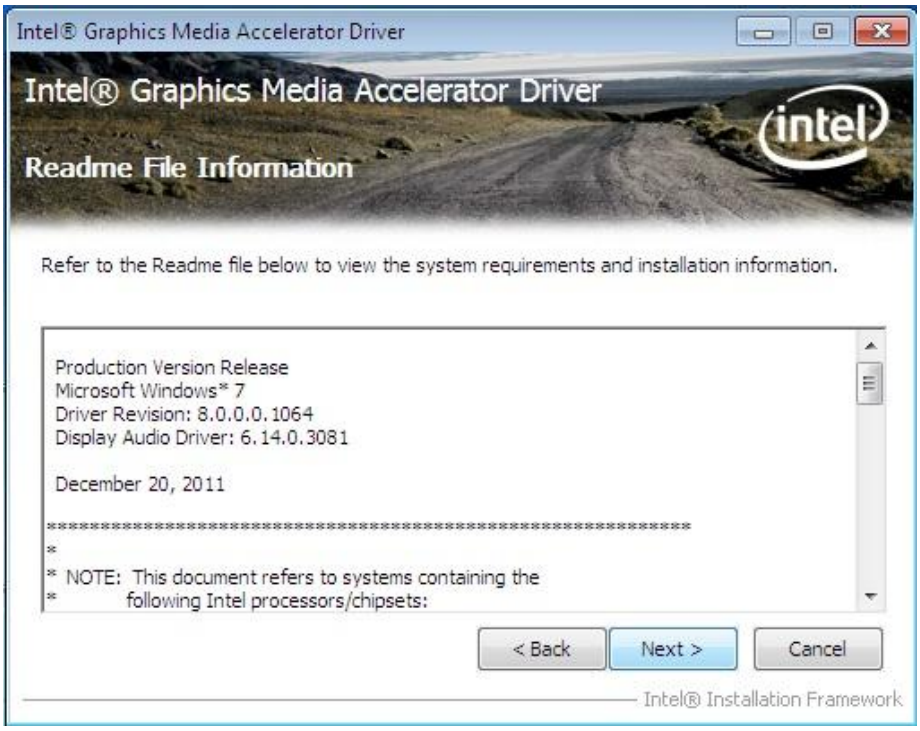
Step.3. Click on “Next “ to install Driver.

Intel® Graphics Media Accelerator Driver
Intel® Graphics Media Accelerator Driver
Welcome to the Setup Program
intel
This setup program will install the following components:
- Intel® Graphics Media Accelerator Driver
- Intel® Display Audio Driver
It is strongly recommended that you exit all programs before continuing. Click Next to continue.
Automatically run WinSAT and enable the Windows Aero desktop theme (if supported).
Install Intel® Control Center
Intel® Control Center provides a centralized starting point for Intel applications making it easier to find the programs that you need.
< Back
Next >
Cancel
Intel® Installation Framework

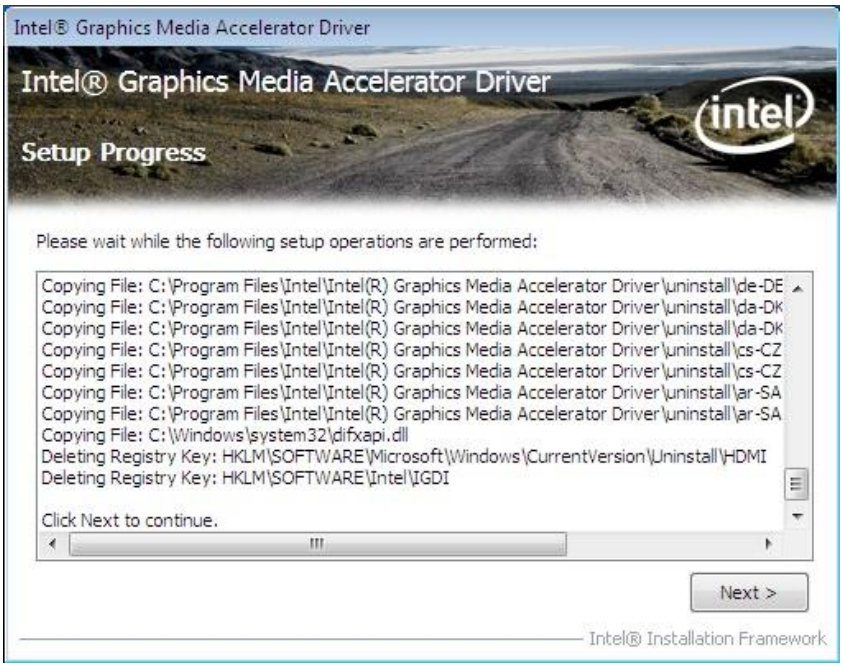
Step.4. Click on “Yes “ to agree License.


Intel® Graphics Media Accelerator Driver
Intel® Graphics Media Accelerator Driver
License Agreement
intel
You must accept all of the terms of the license agreement in order to continue the setup program. Do you accept the terms?
INTEL SOFTWARE LICENSE AGREEMENT (OEM / IHV / ISV Distribution & Single User)
IMPORTANT - READ BEFORE COPYING, INSTALLING OR USING.
Do not use or load software from this site or any associated materials (collectively, the "Software") until you have carefully read the following terms and conditions. By loading or using the Software, you agree to the terms of this Agreement. If you do not wish to so agree, do not install or use the Software.
Please Also Note:
• If you are an Original Equipment Manufacturer (OEM), Independent Hardware Vendor (IHV) or Independent Software Vendor (ISV), this complete LICENSE AGREEMENT applies;
• If you are an End-User, then only Exhibit A, the INTEL SOFTWARE LICENSE AGREEMENT, applies.
< Back
Yes
No
Intel® Installation Framework

Step.5. Click on “Next “ to install Driver.


Intel® Graphics Media Accelerator Driver
Intel® Graphics Media Accelerator Driver
Readme File Information
intel
Refer to the Readme file below to view the system requirements and installation information.
Production Version Release
Microsoft Windows* 7
Driver Revision: 8.0.0.0.1064
Display Audio Driver: 6.14.0.3081
December 20, 2011
****
* NOTE: This document refers to systems containing the
* following Intel processors/chipsets:
< Back
Next >
Cancel
Intel® Installation Framework

Step.6. Click on “Next “ to install Driver.


Intel® Graphics Media Accelerator Driver
Intel® Graphics Media Accelerator Driver
Setup Progress
intel
Please wait while the following setup operations are performed:
Copying File: C:\Program Files\Intel\Intel(R) Graphics Media Accelerator Driver\uninstall\de-DE
Copying File: C:\Program Files\Intel\Intel(R) Graphics Media Accelerator Driver\uninstall\da-DK
Copying File: C:\Program Files\Intel\Intel(R) Graphics Media Accelerator Driver\uninstall\da-DK
Copying File: C:\Program Files\Intel\Intel(R) Graphics Media Accelerator Driver\uninstall\cs-CZ
Copying File: C:\Program Files\Intel\Intel(R) Graphics Media Accelerator Driver\uninstall\cs-CZ
Copying File: C:\Program Files\Intel\Intel(R) Graphics Media Accelerator Driver\uninstall\ar-SA
Copying File: C:\Program Files\Intel\Intel(R) Graphics Media Accelerator Driver\uninstall\ar-SA
Copying File: C:\Windows\system32\difxapi.dll
Deleting Registry Key: HKLM\SOFTWARE\Microsoft\Windows\CurrentVersion\Uninstall\HDMI
Deleting Registry Key: HKLM\SOFTWARE\Intel\IGDI
Click Next to continue.
Next >
Intel® Installation Framework

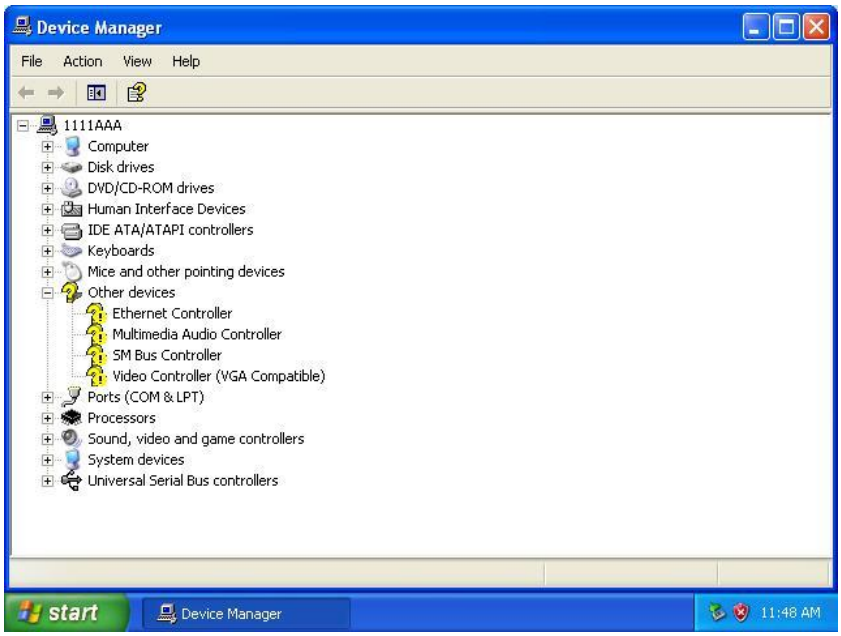
Step.7. Click on “Yes, I want to restart this computer now“ to go on.

Intel® Graphics Media Accelerator Driver
Intel® Graphics Media Accelerator Driver
Setup Is Complete
intel
You must restart this computer for the changes to take effect. Would you like to restart the computer now?
Yes, I want to restart this computer now.
No, I will restart this computer later.
Click Finish, then remove any installation media from the drives.
Finish
Intel® Installation Framework

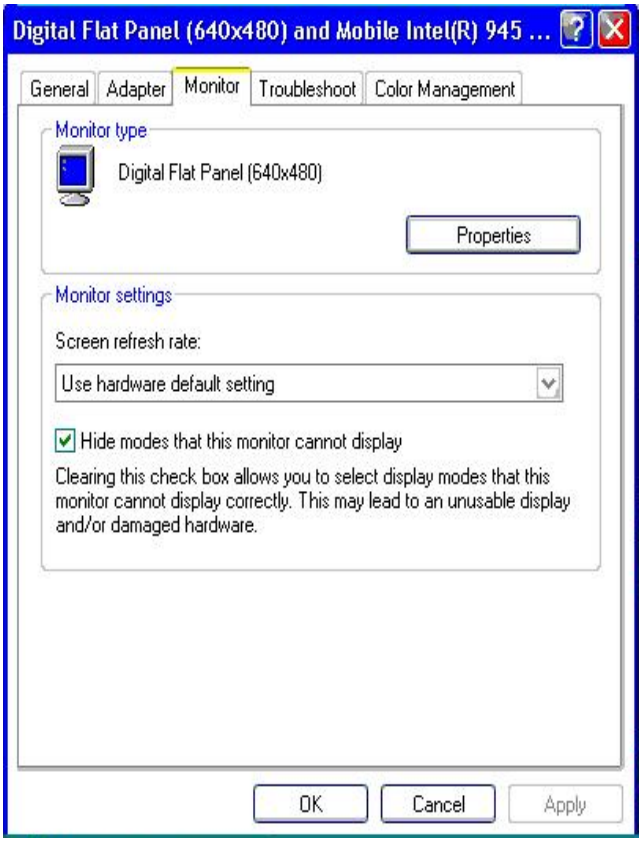
4.2 Panel Resolution Setting

Step.1. Right-click the desktop, and then click Properties.

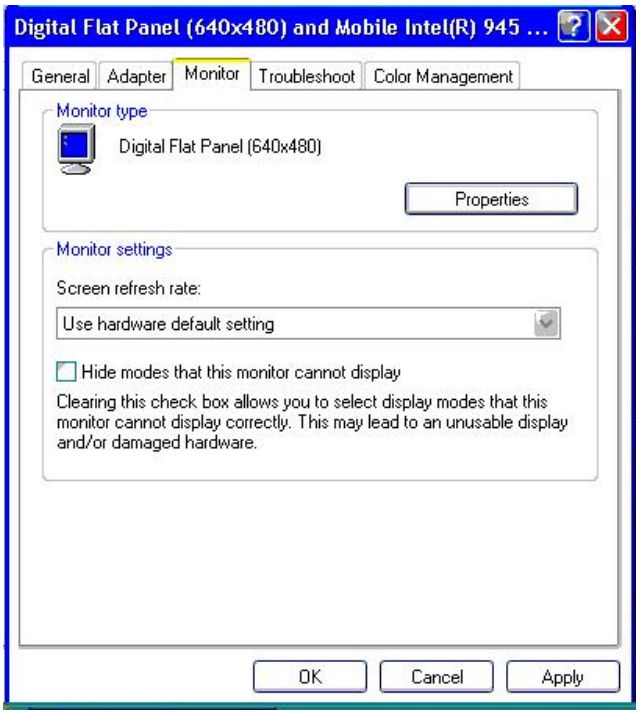
Step.2. In the Display Properties dialog box, click the Settings tab.



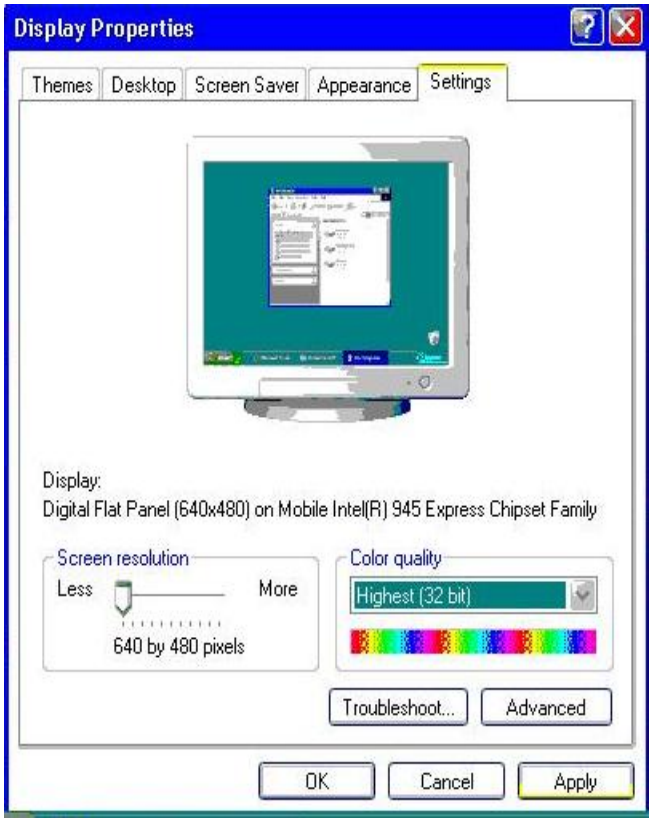
Step.3. Click on “Monitor”.



Step.4. Click on “Hide modes that this monitor cannot display” to remove this option.



Step.5. Click on “Setting”, then could choose 32bit color qualify.



CHAPTER 5

Ethernet Driver Installation

This chapter offers information on the Ethernet software installation utility. Sections include:

- Introduction
- Installation of Ethernet Driver

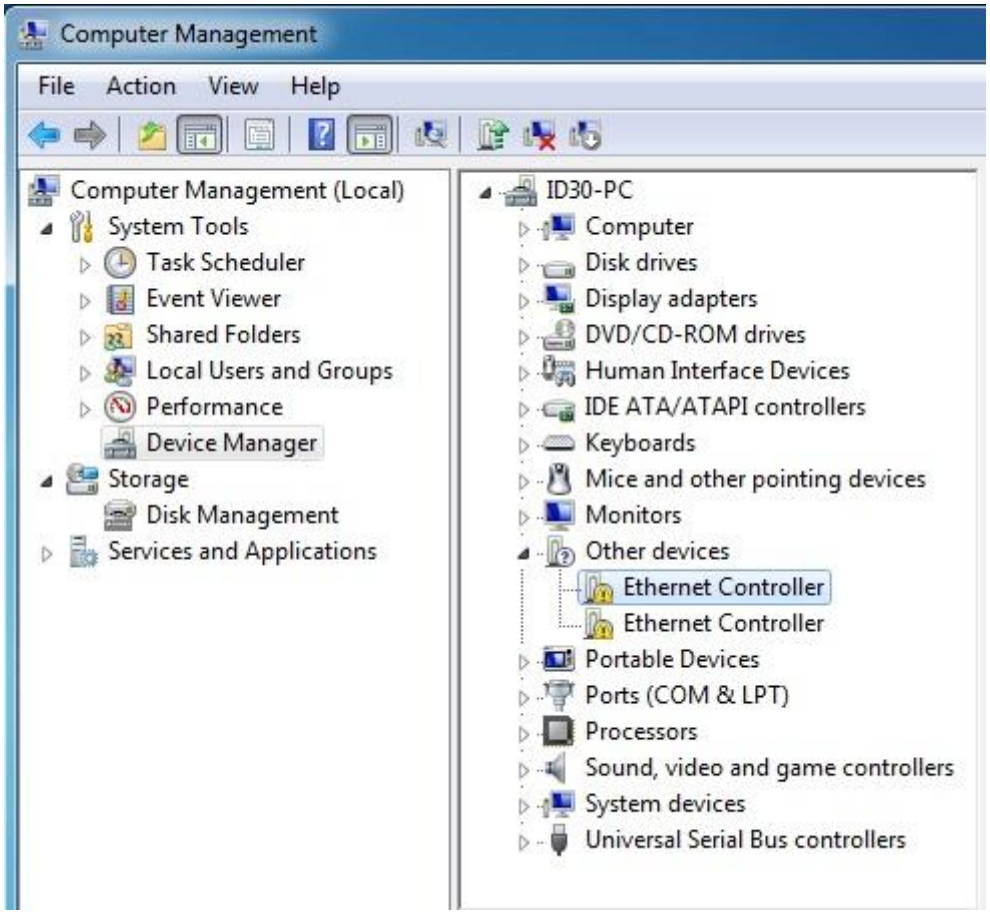
Chapter 5: Ethernet Driver Installation

5.1 Installation of Ethernet Driver

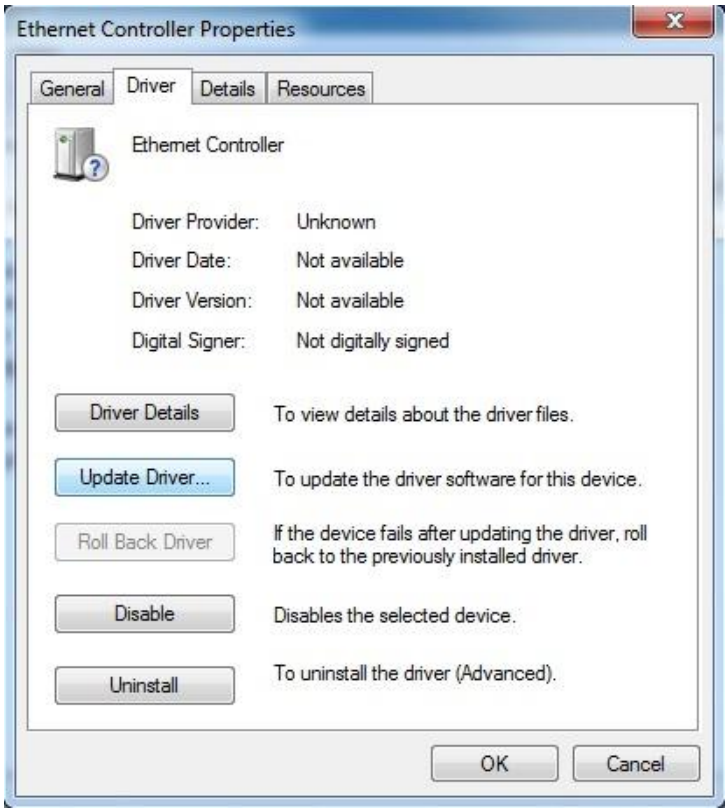
The Users must make sure which operating system you are using in the IB32 Motherboard before installing the Ethernet drivers. Follow the steps below to complete the installation of the Intel WG82574L Gigabit Ethernet controller LAN drivers. You will quickly complete the installation.

Step.1. Right-click the desktop, and then click Properties.

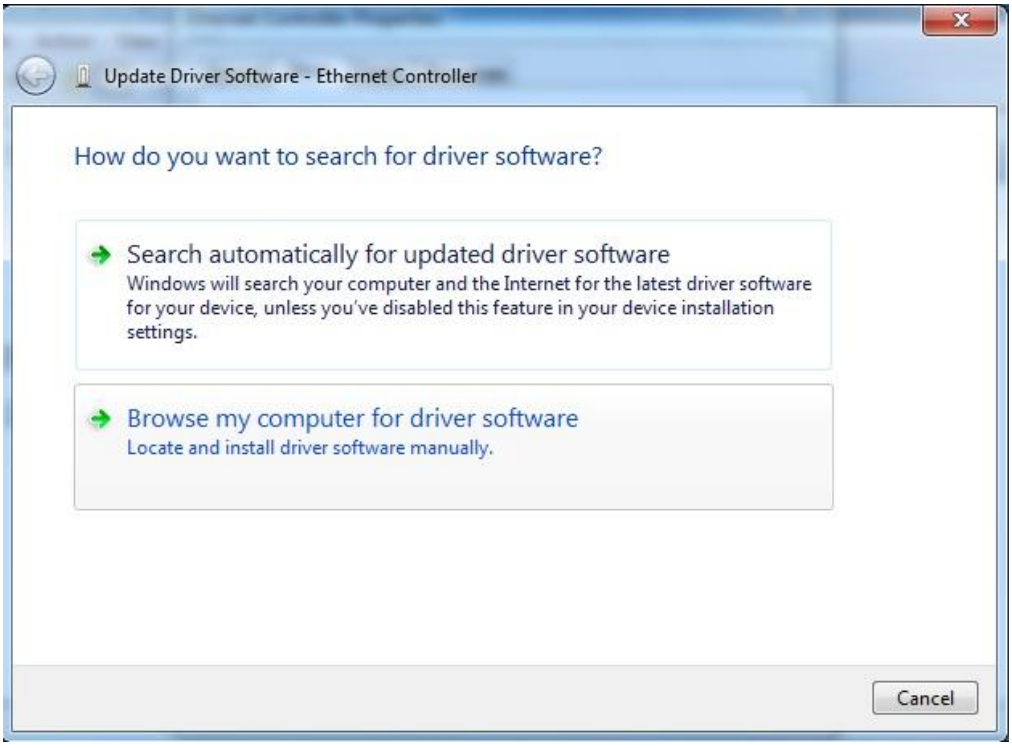
Step.2. In the Other device dialog box, click the Settings tab.



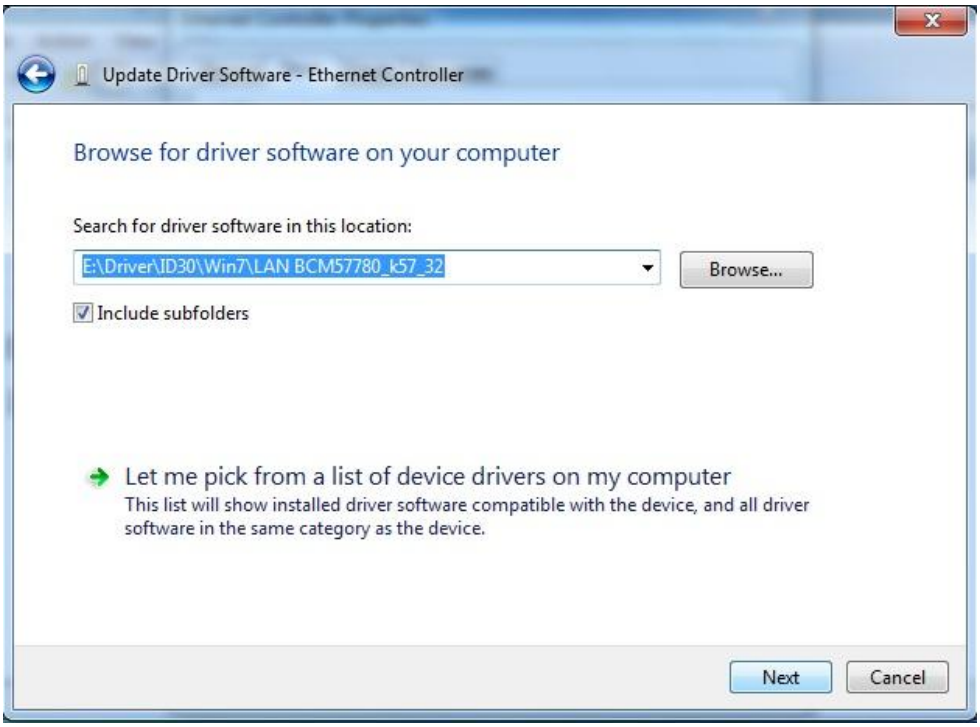
Step.3. Click on “Update Driver” to execute the setup.



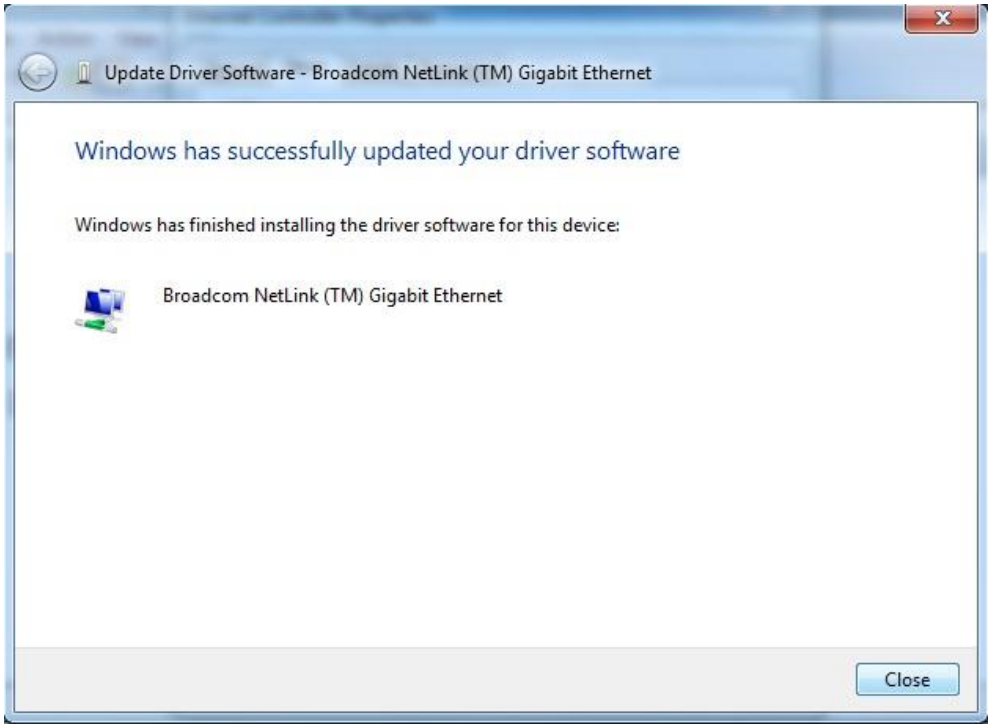
Step.4. Click on “Browse my computer for driver software“ to install driver.


Update Driver Software - Ethernet Controller
How do you want to search for driver software?
Search automatically for updated driver software
Windows will search your computer and the Internet for the latest driver software for your device, unless you've disabled this feature in your device installation settings.
Browse my computer for driver software
Locate and install driver software manually.
Cancel

Step.5. Choose the path to install driver.


Update Driver Software - Ethernet Controller
Browse for driver software on your computer
Search for driver software in this location:
E:\Driver\ID30\Win7\LAN BCM57780_k57_32
Browse...
Include subfolders
Let me pick from a list of device drivers on my computer
This list will show installed driver software compatible with the device, and all driver software in the same category as the device.
Next
Cancel

Step.6. Click on “Close“ and go on.


Update Driver Software - Broadcom NetLink (TM) Gigabit Ethernet
Windows has successfully updated your driver software
Windows has finished installing the driver software for this device:
Broadcom NetLink (TM) Gigabit Ethernet
Close

CHAPTER 6

Audio Driver Installation

This chapter offers information on the Audio software installation utility. Sections include:

- Introduction
- Installation of Audio Driver

Chapter 6: Audio Driver Installation

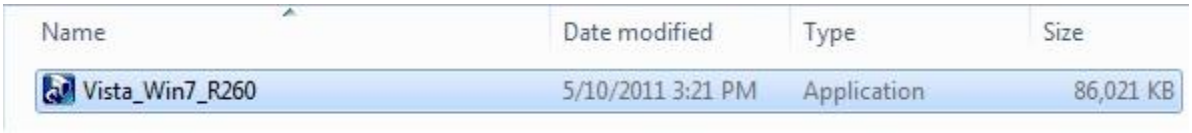
6.1 Introduction

The ALC886 series are high-performance 7.1+2 Channel High Definition Audio Codecs providing ten DAC channels that simultaneously support 7.1 sound playback, plus 2 channels of independent stereo sound output (multiple streaming) through the front panel stereo outputs. The series integrates two stereo ADCs that can support a stereo microphone, and feature Acoustic Echo Cancellation (AEC), Beam Forming (BF), and Noise Suppression (NS) technology.

6.2 Installation of Audio Driver

The users must make sure which operating system you are using in the IB32 Motherboard before installing the Audio drivers. Follow the steps below to complete the installation of the Realtek ALC886 Audio drivers. You will quickly complete the installation.

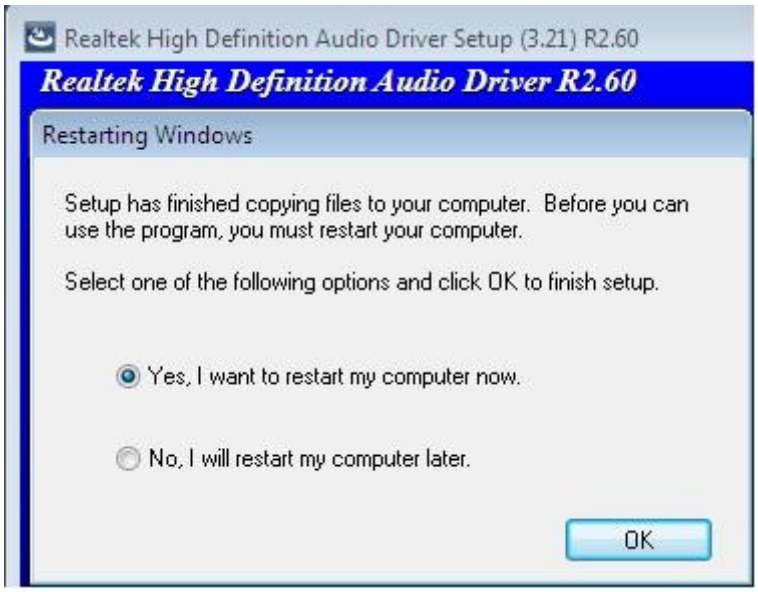
Step.1. Insert the CD that comes with the motherboard. Open the file document “alc655_driver” and click on “Vista_Win7_R260.exe” to execute the setup.



Step.2. Click on “Yes“ to install driver.

Realtek High Definition Audio Driver Setup (3.21) R2.60
Realtek High Definition Audio Driver R2.60
Realtek High Definition Audio Driver - InstallShield Wizard
Welcome to the InstallShield Wizard
The InstallShield Wizard will install Realtek High Definition Audio Driver on your computer .
Do you want to continue the installation of new driver ?
Yes
No

Step.3. Click on “Yes, I want to restart my computer now” to finish installation.


Realtek High Definition Audio Driver Setup (3.21) R2.60
Realtek High Definition Audio Driver R2.60
Restarting Windows
Setup has finished copying files to your computer. Before you can use the program, you must restart your computer.
Select one of the following options and click OK to finish setup.
Yes, I want to restart my computer now.
No, I will restart my computer later.
OK

Fintek COM Port Driver Installation

CHAPTER 7

This chapter describes the step by step method to install the Fintek COM port driver.

Chapter 7: Fintek COM Port Driver

Installation

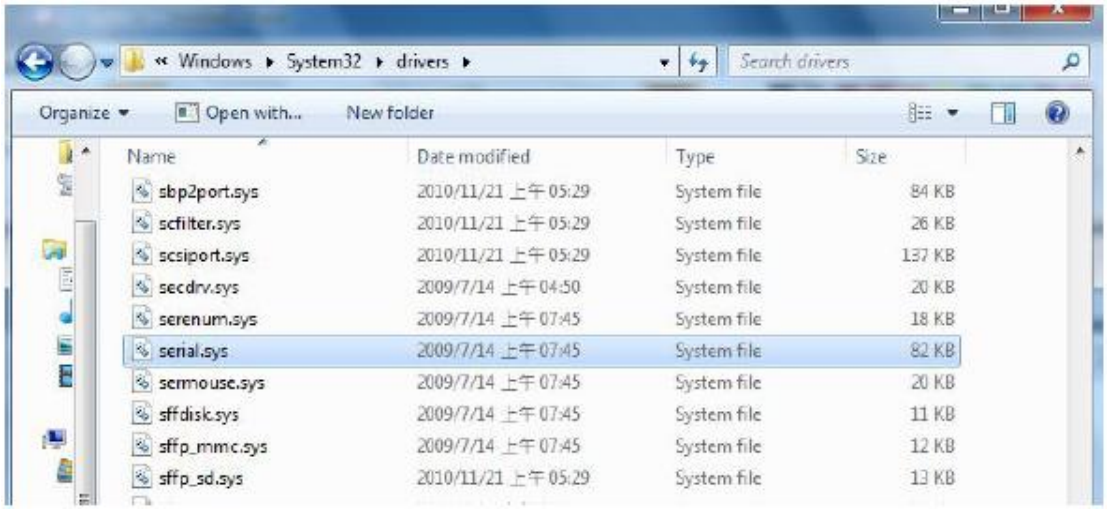
Step.1. If the system is WIN7 please first do close UAC.(Refer following "Disabling User Account Control (UAC) in Windows 7")

Step.2. Extract the Patch_0408.zip to a folder.

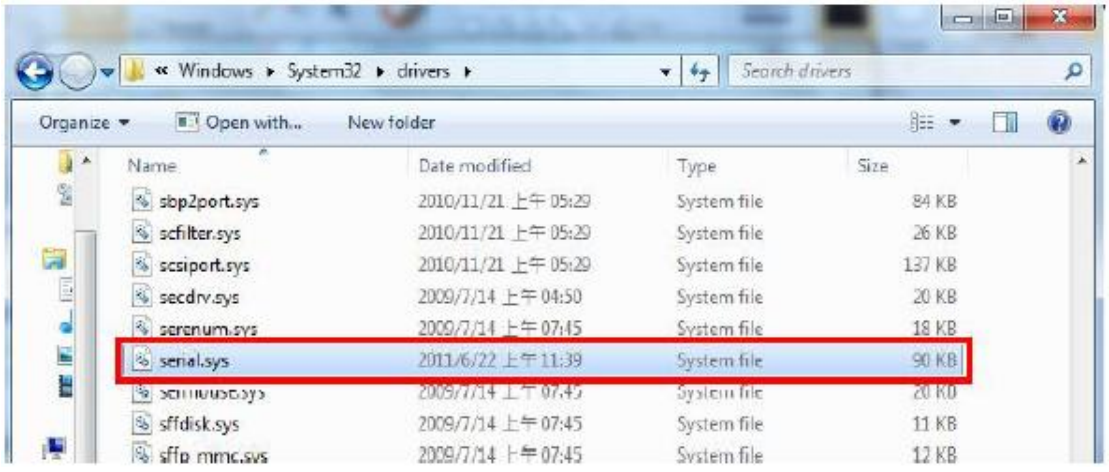
Step.3. Double-click batch file(patch.bat) will install driver.

Step.4. Check driver install success.

Before the update or update fail.


Windows ▸ System32 ▸ drivers ▸
Search drivers
Organize
Open with...
New folder
Name
Date modified
Type
Size
sbp2port.sys 2010/11/21 上午 05:29 System file 84 KB
scfilter.sys 2010/11/21 上午 05:29 System file 26 KB
scsiport.sys 2010/11/21 上午 05:29 System file 137 KB
secdrv.sys 2009/7/14 上午 04:50 System file 20 KB
serenum.sys 2009/7/14 上午 07:45 System file 18 KB
serial.sys 2009/7/14 上午 07:45 System file 82 KB
sermouse.sys 2009/7/14 上午 07:45 System file 20 KB
sffdisk.sys 2009/7/14 上午 07:45 System file 11 KB
sffp_mmc.sys 2009/7/14 上午 07:45 System file 12 KB
sffp_sd.sys 2010/11/21 上午 05:29 System file 13 KB

After the update and update success.


Windows ▸ System32 ▸ drivers ▸
Search drivers
Organize
Open with...
New folder
Name
Date modified
Type
Size
sbp2port.sys 2010/11/21 上午 05:29 System file 84 KB
scfilter.sys 2010/11/21 上午 05:29 System file 26 KB
scsiport.sys 2010/11/21 上午 05:29 System file 137 KB
secdrv.sys 2009/7/14 上午 04:50 System file 20 KB
serenum.sys 2009/7/14 上午 07:45 System file 18 KB
serial.sys 2011/6/22 上午 11:39 System file 90 KB
sermouse.sys 2009/7/14 上午 07:45 System file 20 KB
sffdisk.sys 2009/7/14 上午 07:45 System file 11 KB
sffp_mmc.sys 2009/7/14 上午 07:45 System file 12 KB

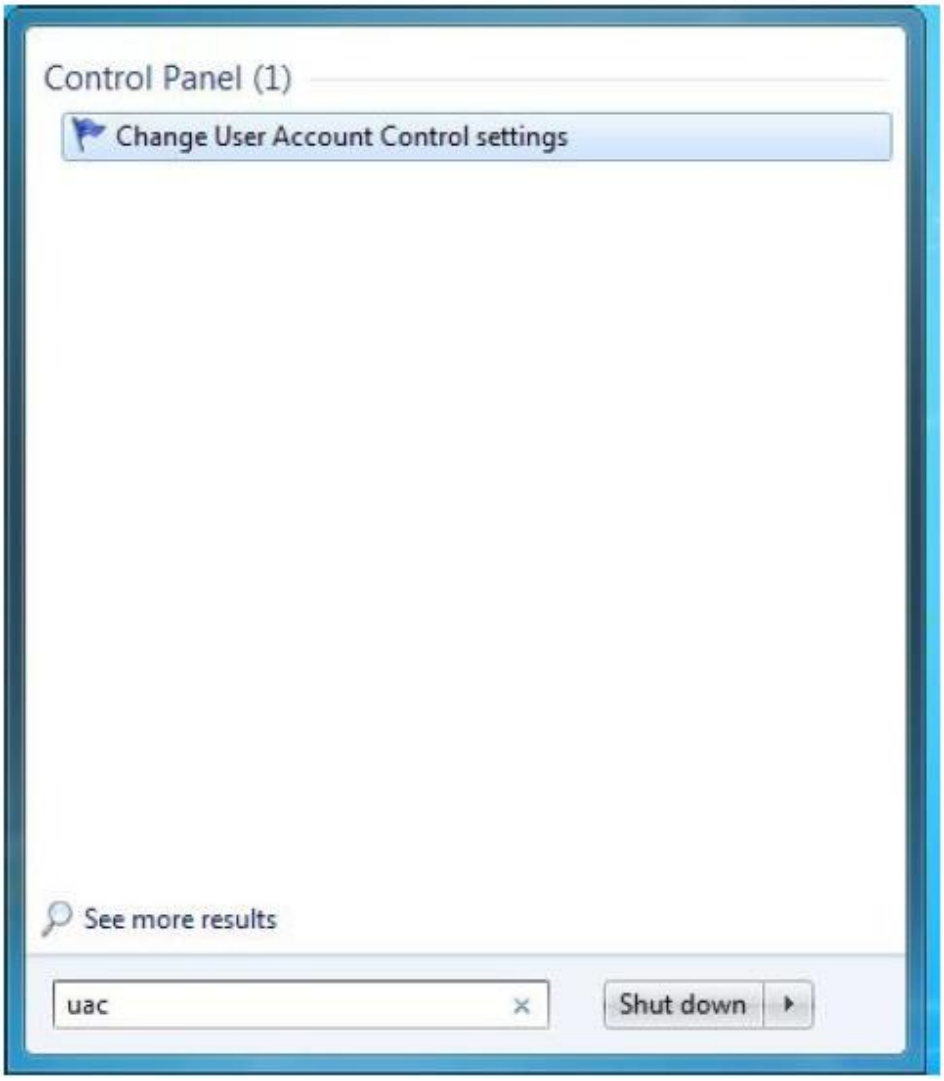
Step.5. You will need to restart your computer for driver install success.

Type in this command from the Run menu:

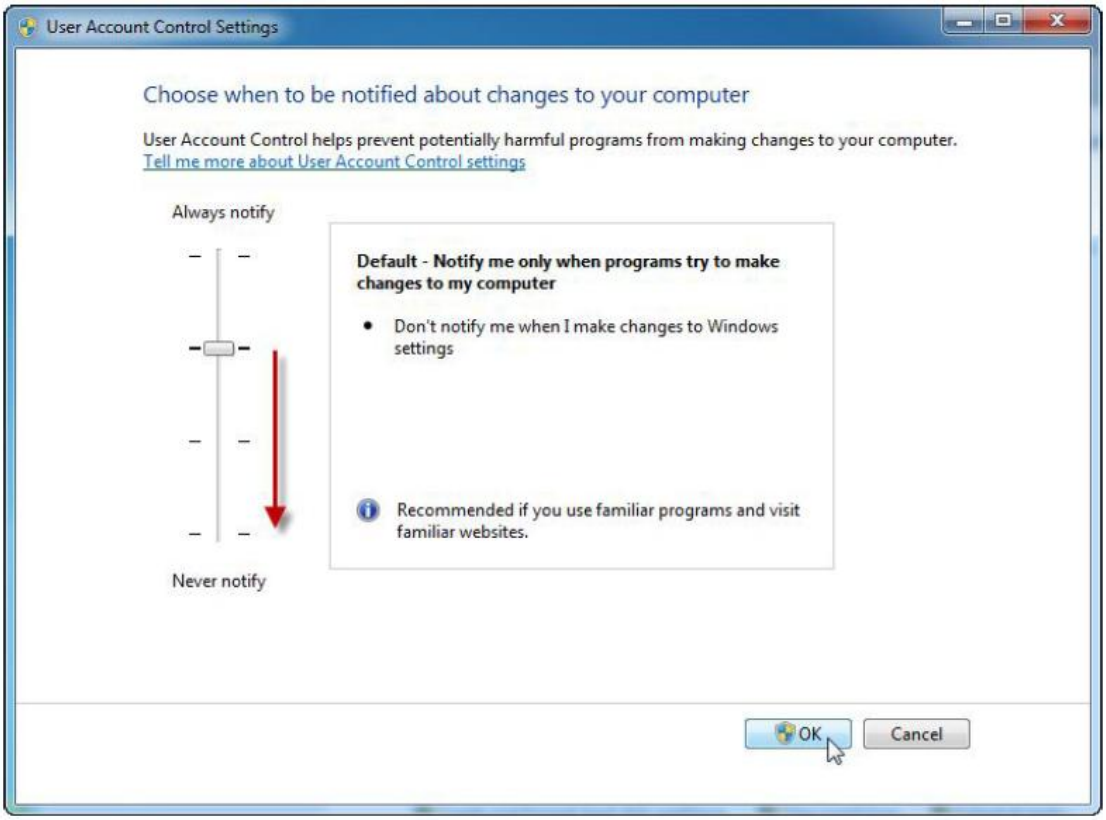
C:\Windows\System32\UserAccountControlSettings.exe

or

uac



To turn off UAC, move the slider to the Never notify position, and then click OK. If you're prompted for an administrator password or confirmation, type the password or provide confirmation.


User Account Control Settings
Choose when to be notified about changes to your computer
User Account Control helps prevent potentially harmful programs from making changes to your computer.
Tell me more about User Account Control settings
Always notify
Default - Notify me only when programs try to make changes to my computer
Don't notify me when I make changes to Windows settings
Recommended if you use familiar programs and visit familiar websites.
Never notify
OK
Cancel

To turn UAC back on, move the slider to choose when you want to be notified, and then click OK. If
you're prompted for an administrator password or confirmation, type the password or provide
confirmation.
You will need to restart your computer for UAC to be turned off.

CHAPTER 8

AMI BIOS Setup

This chapter describes how to set up the BIOS configuration

Chapter 8: AMI BIOS SETUP

8.1 How and When to Use BIOS Setup

For enter to the Tablet PC BIOS setup, you need to connect with an external USB keyboard, press "**Del**" key when the prompt appears on the screen during start up. The prompt screen shows only few seconds so need press Del key quickly.

****NOTICE**

Updated BIOS version may be published after the manual is released. Check with the latest version of BIOS on website.

You may need to run BIOS setup utility when the below status.

1. Error message on sreen indicate to check BIOS setup.
2. Restoring the factory default settings.
3. Modifing the specific hardware specification
4. Want to optimize the specification.

In order to control the keyboard to select BIOS utility setup, you need

Keyboard Icon	Function Description
⬅ ➡	Selects a menu title.
⬆ ⬇	Selects an item or option.
Enter	Go to the sub-menu when available. Opens or closes the option window when an item is selected.
Esc	To leave sub-menu and return to main menu.

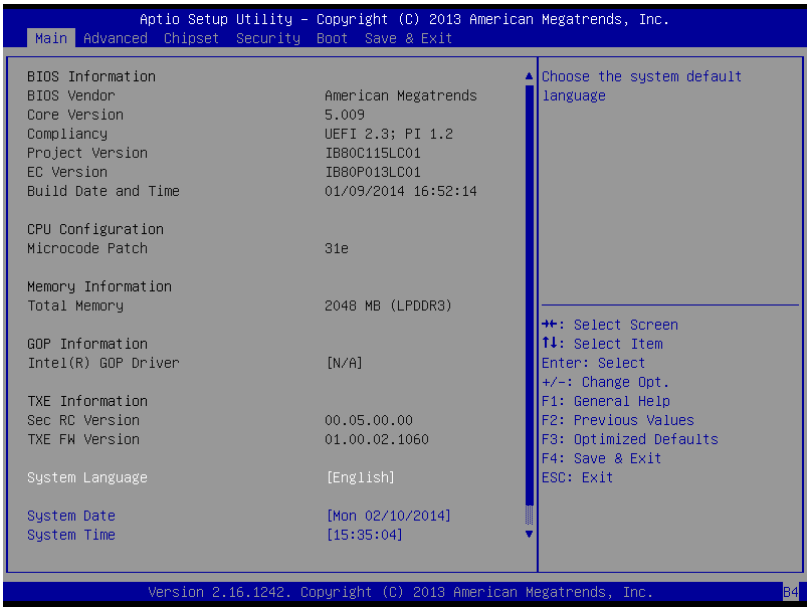
****NOTICE**

You can press the F1, F2, F3, F4, –/+, and Esc keys by connecting a USB keyboard to your tablet PC.

8.2 BIOS Functions

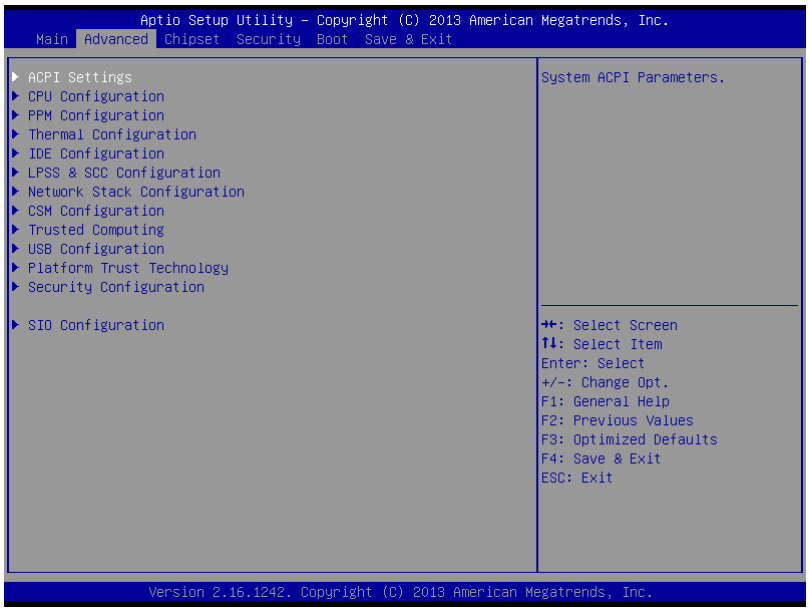
8.2.1 Main Menu

The Main menu contains the information of the Tablet system including BIOS version, processor RC version, system language, time, and date.

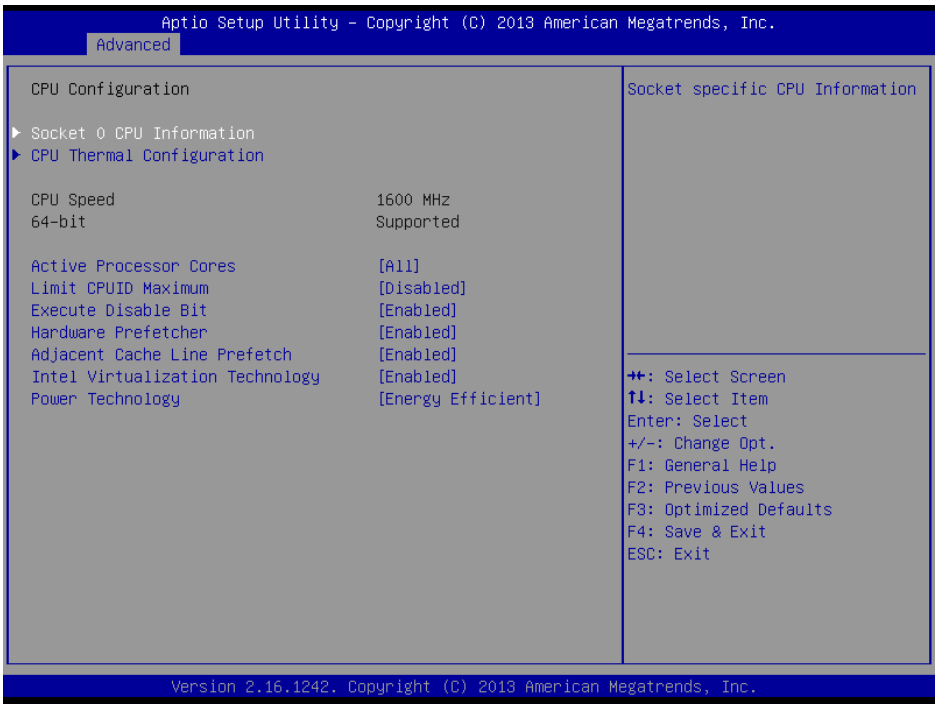


8.2.2 Advanced Menu

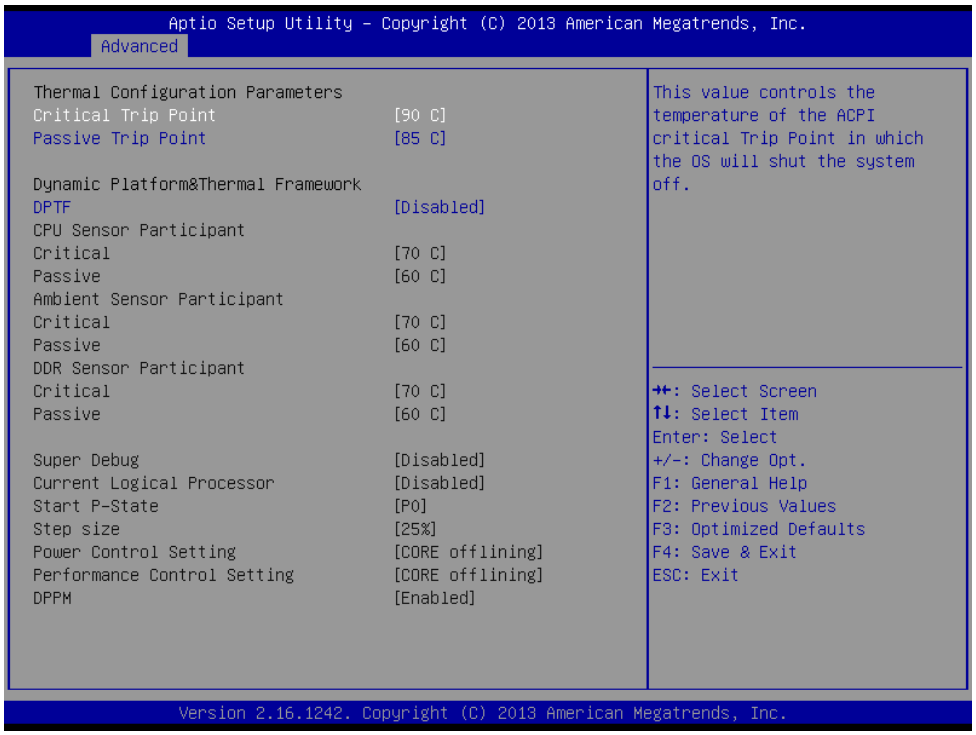
The Advanced menu contains the selections of PXE OpROM and Watch Dog Timer, and the settings of PCI Subsystem, ACPI, and S5 RTC Wake. Besides, it also contains the configuration information of CPU, Thermal, IDE/SATA, USB, and PPM Configuration.



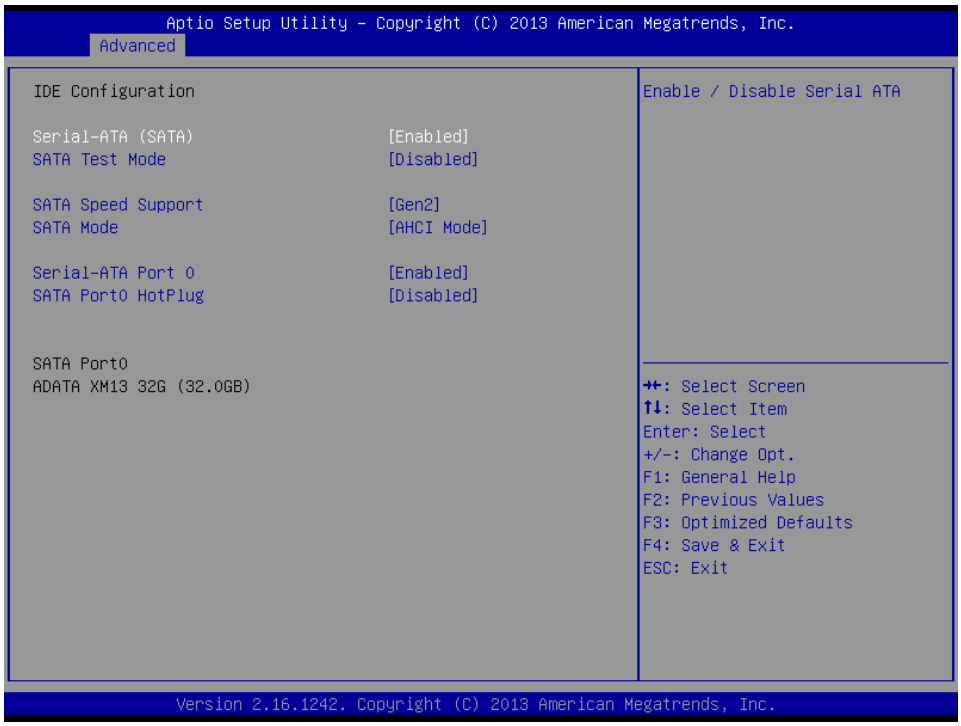
1. CPU Configuration



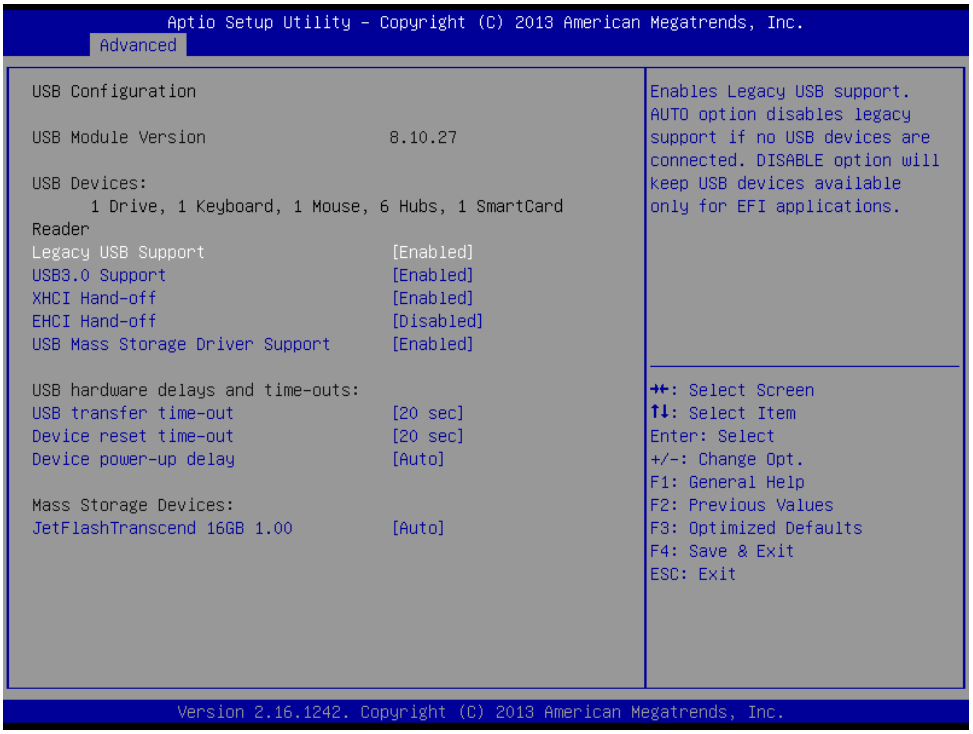
2. Thermal Configuration


Aptio Setup Utility – Copyright (C) 2013 American Megatrends, Inc.
Advanced
Thermal Configuration Parameters
Critical Trip Point [90 C]
Passive Trip Point [85 C]
Dynamic Platform&Thermal Framework
DPTF [Disabled]
CPU Sensor Participant
Critical [70 C]
Passive [60 C]
Ambient Sensor Participant
Critical [70 C]
Passive [60 C]
DDR Sensor Participant
Critical [70 C]
Passive [60 C]
Super Debug [Disabled]
Current Logical Processor [Disabled]
Start P-State [P0]
Step size [25%]
Power Control Setting [CORE offlining]
Performance Control Setting [CORE offlining]
DPPM [Enabled]
This value controls the temperature of the ACPI critical Trip Point in which the OS will shut the system off.
→←: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F2: Previous Values
F3: Optimized Defaults
F4: Save & Exit
ESC: Exit
Version 2.16.1242. Copyright (C) 2013 American Megatrends, Inc.

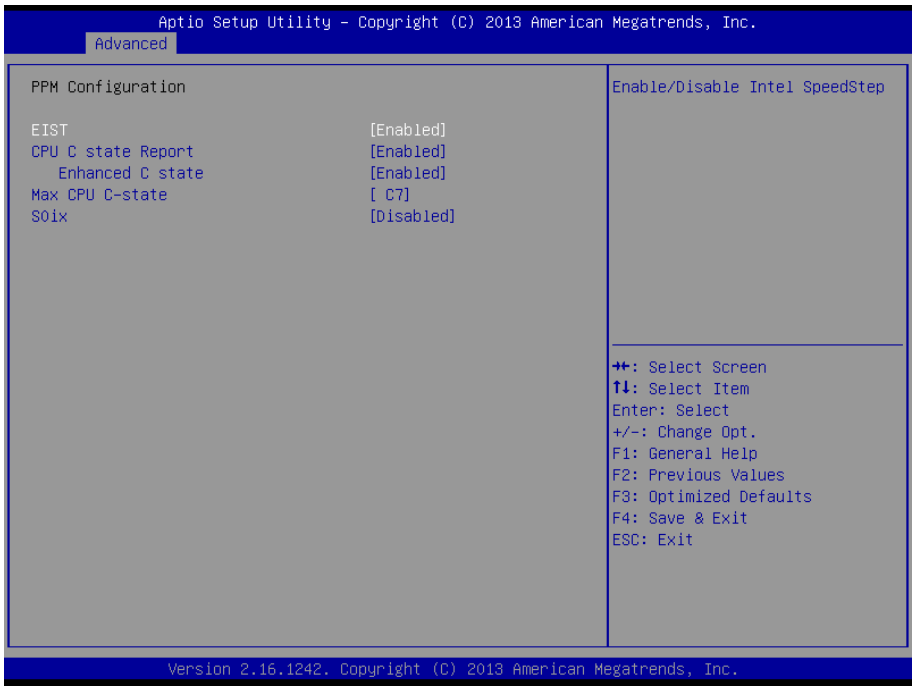
3. IDE / SATA Configuration



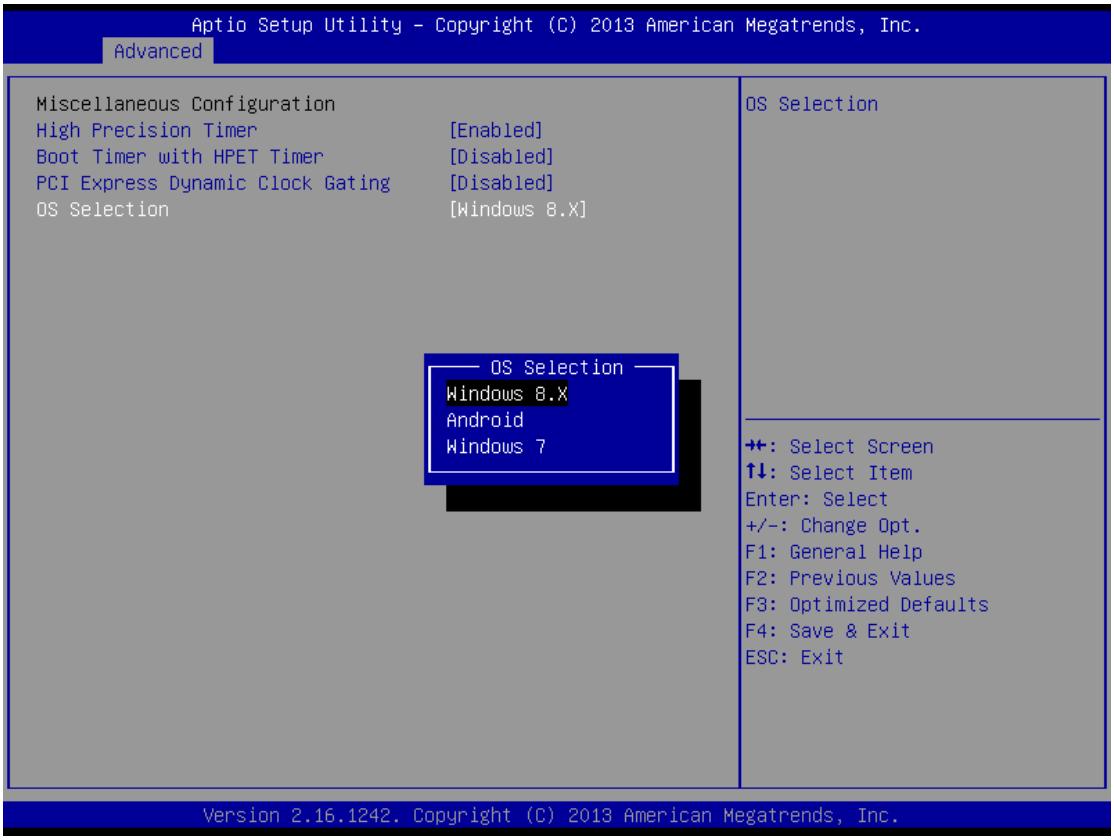
4. USB Configuration


Aptio Setup Utility – Copyright (C) 2013 American Megatrends, Inc.
Advanced
USB Configuration
USB Module Version 8.10.27
USB Devices:
1 Drive, 1 Keyboard, 1 Mouse, 6 Hubs, 1 SmartCard Reader
Legacy USB Support [Enabled]
USB3.0 Support [Enabled]
XHCI Hand-off [Enabled]
EHCI Hand-off [Disabled]
USB Mass Storage Driver Support [Enabled]
USB hardware delays and time-outs:
USB transfer time-out [20 sec]
Device reset time-out [20 sec]
Device power-up delay [Auto]
Mass Storage Devices:
JetFlashTranscend 16GB 1.00 [Auto]
Enables Legacy USB support. AUTO option disables legacy support if no USB devices are connected. DISABLE option will keep USB devices available only for EFI applications.
→←: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F2: Previous Values
F3: Optimized Defaults
F4: Save & Exit
ESC: Exit
Version 2.16.1242. Copyright (C) 2013 American Megatrends, Inc.

5. PPM Configuration

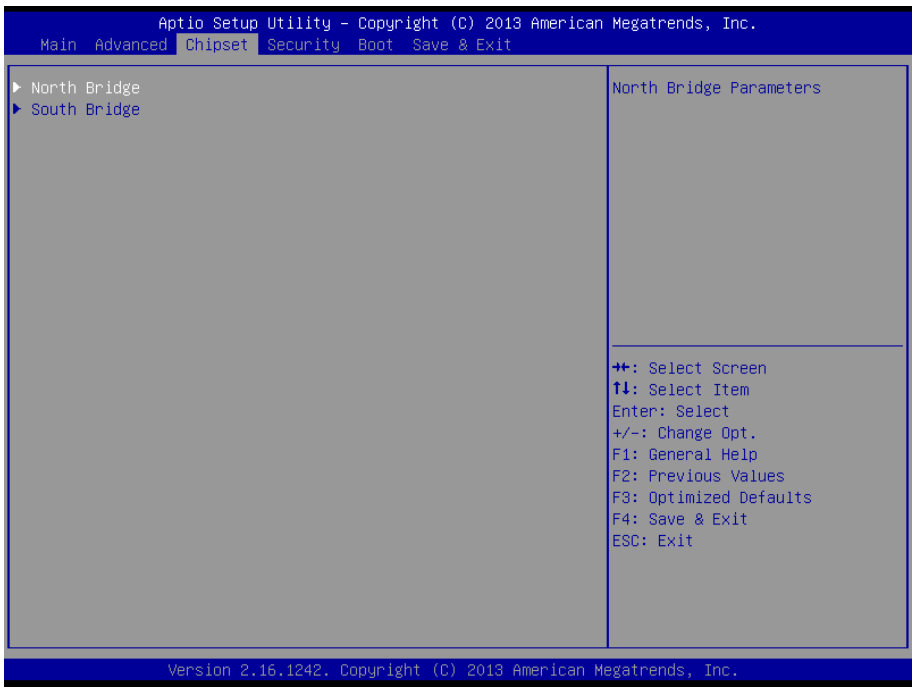


6. OS Selection



8.2.3 Chipset Menu

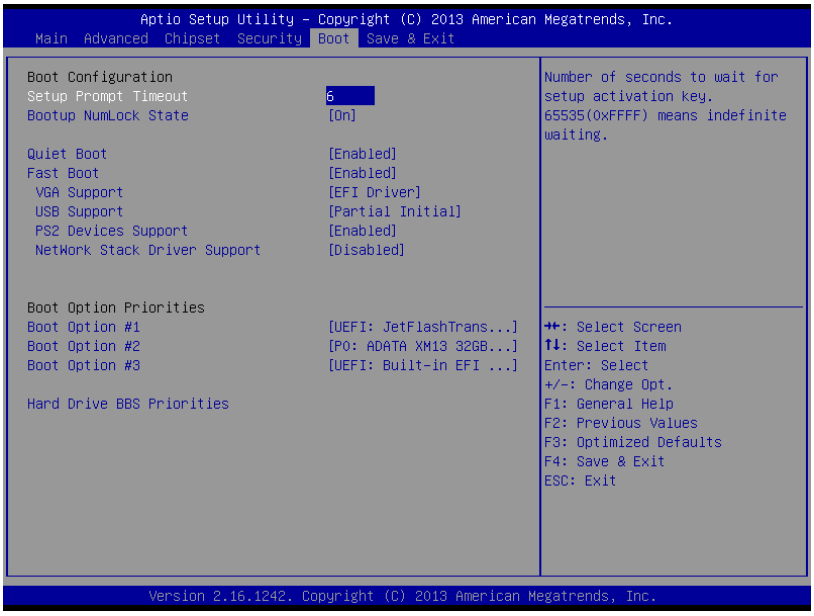
The Chipset menu contains the information of North Bridge and South Bridge.



8.2.4 Boot Menu

The Boot menu sets the sequence of the devices to be searched for the operating system.

The bootable devices will be automatically detected during POST and shown here, allowing you to set the sequence that the BIOS uses to look for a boot device from which to load the operating system. A brief description of button usage is listed next:


Aptio Setup Utility – Copyright (C) 2013 American Megatrends, Inc.
Main Advanced Chipset Security Boot Save & Exit
Boot Configuration
Setup Prompt Timeout 6
Bootup NumLock State [On]
Quiet Boot [Enabled]
Fast Boot [Enabled]
VGA Support [EFI Driver]
USB Support [Partial Initial]
PS2 Devices Support [Enabled]
NetWork Stack Driver Support [Disabled]
Boot Option Priorities
Boot Option #1 [UEFI: JetFlashTrans...]
Boot Option #2 [P0: ADATA XM13 32GB...]
Boot Option #3 [UEFI: Built-in EFI ...]
Hard Drive BBS Priorities
Number of seconds to wait for setup activation key. 65535(0xFFFF) means indefinite waiting.
→←: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F2: Previous Values
F3: Optimized Defaults
F4: Save & Exit
ESC: Exit
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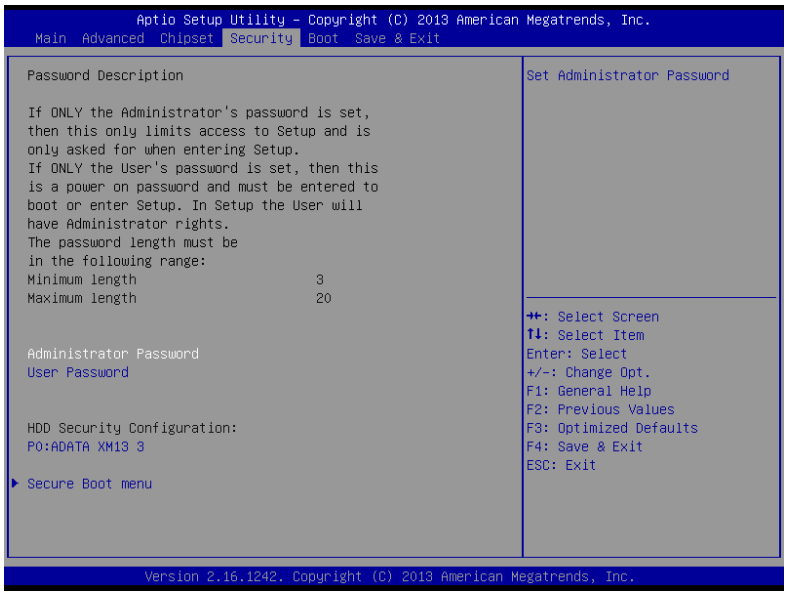
8.2.5 Security Menu

In the Security menu, users can set Administrator Password, User Password, and HDD Security Configuration.


Aptio Setup Utility – Copyright (C) 2013 American Megatrends, Inc.
Main Advanced Chipset Security Boot Save & Exit
Password Description
If ONLY the Administrator's password is set, then this only limits access to Setup and is only asked for when entering Setup.
If ONLY the User's password is set, then this is a power on password and must be entered to boot or enter Setup. In Setup the User will have Administrator rights.
The password length must be in the following range:
Minimum length 3
Maximum length 20
Administrator Password
User Password
HDD Security Configuration:
P0:ADATA XM13 3
Secure Boot menu
Set Administrator Password
→←: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F2: Previous Values
F3: Optimized Defaults
F4: Save & Exit
ESC: Exit
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8.2.6 Save & Exit Menu

The Exit menu displays ways of exiting BIOS Setup utility. After finishing with your settings, you must save and exit so that the changes can take effect.

Save Canges and Exit saves the changes you have made and exits BIOS Setup utility.

Discarding Changes and Exit exits BIOS Setup utility without saving the changes you have made.

Save Canges and Rest saves the changes you have made and resets BIOS system.

Discarding Changes and Reset resets BIOS system without saving the changes you have made.

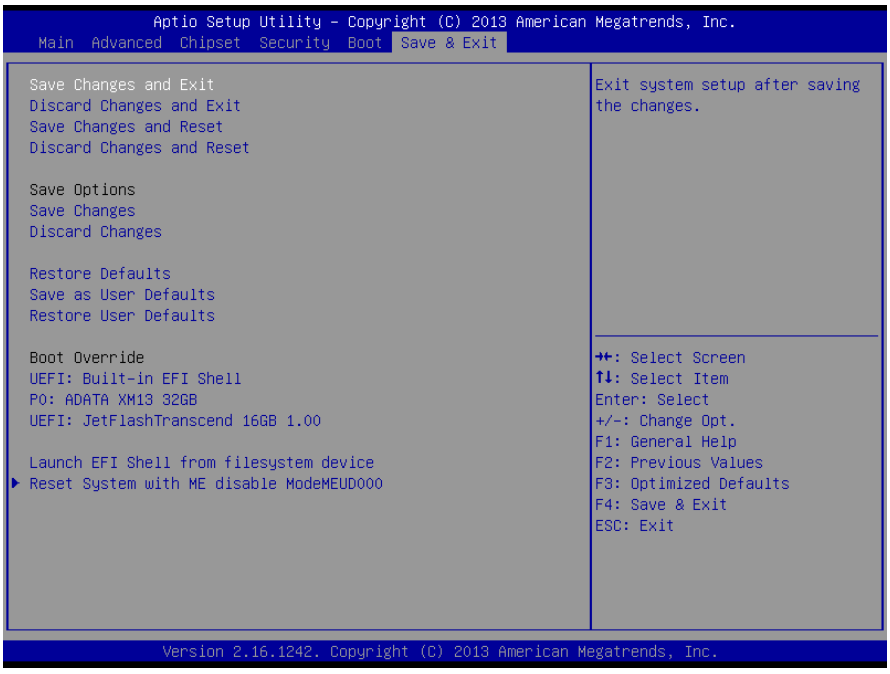
Save Changes done so far to any of the setup options.

Discard Changes done so far to any of the setup options.

Restore Defaults loads/restore the factory default values for all the items.

Save as User Defaults saves the changes one so far as User Defaults.

Restore User Defaults loads/restore the User default values for all the items.


Aptio Setup Utility – Copyright (C) 2013 American Megatrends, Inc.
Main Advanced Chipset Security Boot Save & Exit
Save Changes and Exit
Discard Changes and Exit
Save Changes and Reset
Discard Changes and Reset
Save Options
Save Changes
Discard Changes
Restore Defaults
Save as User Defaults
Restore User Defaults
Boot Override
UEFI: Built-in EFI Shell
P0: ADATA XM13 32GB
UEFI: JetFlashTranscend 16GB 1.00
Launch EFI Shell from filesystem device
Reset System with ME disable ModeMEUD000
Exit system setup after saving the changes.
→←: Select Screen
↑↓: Select Item
Enter: Select
+/-: Change Opt.
F1: General Help
F2: Previous Values
F3: Optimized Defaults
F4: Save & Exit
ESC: Exit
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8.3 Using Recovery Wizard to Restore Computer

Bay Trail Intel® Celeron N2930 series computer has a dedicate recovery partition stored on the hard drive of the PC to enable quick one-key recovery process. This partition occupies about 11GB of the storage space, and comes built-in to each IB70 series PC.

Warning: Before starting the recovery process, be sure to backup all user data, as all data will be lost after the recovery process.

Follow the procedure below to enable quick one-key recovery procedure:

- Plug-in the AC adapter to Bay Trail series computer. Make sure the computer stays plugged in to power source during the recovery process.
- Turn on the computer, and when the boot screen shows up, press the **F6** to initiate the Recovery Wizard.
- The following screen shows the Recovery Wizard. Click on “Recovery” button to continue.

Recovery Wizard
Click " Recovery " to restore your system.
WARNING!
The process will clear all of your data.
If you do not want to restore your system please press " Quit " to reboot.
Recovery
Quit

- A warning message about data loss will show up. Make sure data is backed up before recovery, and click on “Yes” to continue.

Recovery your systems
Are you sure you want to recovery your system?
The action will delete all of your data on your disk.
是(Y)
否(N)

- Wait till the recovery process to complete. During the recovery process, a command prompt will show up to indicate the percent of recovery process. After recovery is completed, and the tablet computer will restart automatically.

Recovery Wizard
X:\windows\System32\cmd.exe
DiskPart succeeded in cleaning the disk.
DiskPart successfully converted the selected disk to GPT format.
DiskPart succeeded in creating the specified partition.
100 percent completed
DiskPart successfully formatted the volume.
DiskPart successfully assigned the drive letter or mount point.
DiskPart succeeded in creating the specified partition.
DiskPart succeeded in creating the specified partition.
100 percent completed
DiskPart successfully formatted the volume.
DiskPart successfully assigned the drive letter or mount point.
DiskPart succeeded in creating the specified partition.
0 percent completed
Version 2014.02

Service / Update

Official Website

The relevant information about IB32 including the latest news and downloads will be presented in the website below:
http://www.winmate.com.tw/BoxPc/EmbeddedSpec.asp?Prod=05_0156
Please go there to obtain further details of IB32 Motherboard.

Company Information

WinMate Communication INC.
9F, No.111-6, Shin- De Rd,. San- Chung City Taipei 241, Taiwan, R.O.C.
Tel: 886-2-8511-0288
Fax: 886-2-8511-0211
Contact US: sales@winmate.com.tw
Distributor and more Products (Please refer to our website): www.winmate.com.tw

CHAPTER 9

Appendix

This chapter includes appendix items for this user manual

Chapter 9: Appendix

9.1 Digital I/O Sample Code

To find the Digital I/O Sample code, please refer to the IB32 driver CD SDK or contact us.

9.2 Watchdog Sample Code

To find the Watchdog Sample code, please refer to the IB32 driver CD SDK or contact us.